

PITMAN'S TRANSPORT LIBRARY
GENERAL EDITOR: PHILIP BURET

RAILWAY RATES

PITMAN'S TRANSPORT LIBRARY

EDITED BY PHILIP BURTT, M.Inst.T.
*formerly Deputy General Manager of the North
Eastern Railway.*

*Specially prepared to cover the requirements
of the Institute of Transport's Membership
Examination syllabus*

PORT ECONOMICS: An Elementary Study of Port Affairs

By Dr. BRYSSON CUNNINGHAM,
*Author of "Port Administration and Operation," "Cargo,
Handling at Ports," "The Principles and Practice of
Dock Engineering," "The Principles and Practice of
Harbour Engineering," "The Dock and Harbour
Engineer's Reference Book," etc.*

6s. net.

THE RIGHTS AND DUTIES OF TRANSPORT UNDERTAKINGS

By H. BARRS DAVIES, M.A., Solicitor

5s. net.

MODERN RAILWAY OPERATION

**By D. R. LAMB, M.Inst.T., Editor of
"Modern Transport."**

7s. 6d. net.

RAILWAY RATES: PRINCIPLES AND PROBLEMS

By PHILIP BURTT, M.Inst.T.

ROAD MAKING AND ROAD USING

By T. SALKIELD, M.Inst.C.E., M.Inst.T.

THE HISTORY AND DEVELOPMENT OF ROAD TRANSPORT

By JAMES PATERSON, M.C., M.Inst.T.

COMMERCIAL AIR TRANSPORT

**By Lieut.-Col. Ivo EDWARDS, C.M.G.,
Deputy Director of Air Transport, and
F. TYMMS, M.C., A.F.R.A.E.S.**

SIR ISAAC PITMAN & SONS, LTD.

RAILWAY RATES

PRINCIPLES AND PROBLEMS

BY
PHILIP BURTT, M.Inst.T.

FORMERLY DEPUTY GENERAL MANAGER
NORTH EASTERN RAILWAY



LONDON
SIR ISAAC PITMAN & SONS, LTD.
PARKER STREET, KINGSWAY, W.C.2
BATH, MELBOURNE, TORONTO, NEW YORK
1926

PRINTED IN GREAT BRITAIN
AT THE FITMAN PRESS, BATH

PREFACE

THERE is a two-fold object in including this work on the somewhat intricate subject of our British system of railway rates and charges in Messrs. Pitman's new "Transport Library" textbooks. In the first instance, it seemed to me, when the publishers asked me to write, that any new series of transport textbooks would hardly be complete at the present time without one which should set out for general information what are or have been the main facts in regard to the methods, machinery, and practice adopted in the making of rates, in view of the changes that are about to come following the provisions of the Railways Act, 1921.

Secondly, as we are on the eve of great changes in the system of fixing rates and charges, and so much public attention is being directed to the whole question by the proceedings before the Railway Rates Tribunal, which is trying to evolve new methods and conditions, it is important that the attention of all railway students and intelligent critics should be directed afresh to various underlying principles and problems which have come in for much discussion in the past, and which are inextricably bound up with the whole question of a rates policy and the future of the railways.

The descriptive chapters in the volume consist mainly of a reproduction of some lectures delivered by me at the London School of Economics in the Michaelmas term of 1925, but the suggestions as to problems and practices which may very suitably—some of which I think must—

come up constantly before the travelling public for reconsideration, have been added with a view to stimulate discussion upon a large subject, which is undoubtedly a very vital one in its bearing upon the country's prosperity—the necessity of an enlightened and vigorous national railway policy which must necessarily turn not a little upon the judicious fixing of railway charges.

PHILIP BURTT.

HARPENDEN,
July, 1926.

CONTENTS

CHAP.	PAGE
PREFACE	V
I. OUR BRITISH RAILWAY RATES SYSTEM	I
II. A STATION RATE BOOK	8
III. CLASSIFICATION OF COMMODITIES	19
IV. SCALES AND TARIFFS	31
V. " EXCEPTIONAL RATES "	40
VI. THE ADVANTAGE OF GEOGRAPHICAL POSITION	53
VII. THE TERMINALS CONTROVERSY	62
VIII. COST OF SERVICE AS A FACTOR IN RATE-MAKING	75
IX. COMPETITION OR CO-OPERATION	87
X. THE COMING OF THE RATES TRIBUNAL	98
XI. RATE-MAKING PROGRESS IN AMERICA	109
XII. JUSTICE A PRINCIPLE IN RATE-MAKING	124
XIII. COLLECTION AND DELIVERY	129
XIV. THE QUESTION OF RISK	139
XV. THE REVOLUTIONARY ACT OF 1921.	148
INDEX	161

RAILWAY RATES

PRINCIPLES AND PROBLEMS

CHAPTER I

INTRODUCTORY

OUR BRITISH RAILWAY RATES SYSTEM

THE principles which underlie our British system of railway rates will be best understood by a short survey of the history of railway rates, for the methods which have been adopted—they are sometimes erroneously called principles—have come into existence simply with the necessities of the case, year by year. Like Topsy, they have “just growned.” (In the first instance, they came into being with the idea that charges for conveyance must vary with the distance that goods are conveyed, i.e. that they should be based on distance like the charge for a cab or a taxi—so much per mile.) So we have attached to every initiating Act of Parliament in the second quarter of last century (the birth year of railways being 1825) a schedule of charges, giving to each particular railway power or sanction to charge 1d., 2d., 3d., or whatever figure may be named, *per ton per mile* for each different commodity mentioned. The Stockton and Darlington Railway, for instance (which was opened on the 27th September, 1825), the centenary of whose existence was celebrated only last year, was authorized to charge—

For Limestone, Materials for the repair of turnpike roads or highways, and all sorts of Manure except Lime—

Not exceeding 4d. per ton per mile.

For all Coal, Coke, Culm, Cinders, Stone, Marl, Sand, Lime, Clay, Ironstone and other Minerals, Bricks, Tiles, Slates and all gross and unmanufactured articles and building materials—

Not exceeding 4d. per ton per mile.

For all Lead in pigs or sheets, Bar Iron, Wagon Tire, Timber Staves
and Deals and all other goods and commodities—

Not exceeding 6d per ton per mile

For all Coal for Shipment at the port of Stockton—

Not exceeding ½d per ton per mile.

It is interesting to note that the parliamentary schedules, limiting the railway charges in the early days of railways, embodied the principle of equal mileage—the same or equal charge for every mile, whatever the distance. The penny-a-mile fare for third-class passenger travel, which since the war days has been increased to 1½d. a mile, is another illustration of the equal mileage principle.

It is important to state here, at the outset, that great care is necessary in the use of the term "principles," as distinguished from practice or method, when dealing with our rates system in England. "Equal mileage" denotes a principle, clearly understood; so does impartiality of treatment; so does publicity. Exceptional rates, "what the traffic will bear," competition, represent present methods or practices; they are not principles, though often referred to as such. Usually, these phrases, which represent lines of present practice, are mainly used to express departure from the principles which have been in the first instance laid down for the guidance of railway administrators in the fixation of rates and charges.

RAILWAY ACTS, 1888-1892

When, however, the great revision of parliamentary maximum charges took place in 1891 and 1892 (following the Railway and Canal Traffic Act of 1888) a new kind of scale—known now as a "tapering" scale—was adopted for all the principal classes of goods. The principle of this scale is that whilst for a particular commodity the charge is a regular one all over the country for a given distance, yet the rate per mile decreases as the distance lengthens. This scale is referred to in more detail at page 34. It is a scale based uniformly upon mileage, though not *equal* mileage. The equal mileage scale was retained for a few exceptional articles and localities only.

BRITISH RATES MAINLY EXCEPTIONAL

It should now at once be explained that the system of charging consistently in accordance with or in proportion to the distance goods are carried, or regulated by scale, has long ago been superseded for the bulk of traffic carried by the railway companies of Great Britain. Under the exaggerated system of competition between railways and other forms of transport, which has existed also between the railway systems themselves, it has been impossible, for more than three-quarters of a century now, to maintain the principle of regulating conveyance charges under any system of mileage, either equal mileage or tapering scales, or any other method, such as that of basing rates in accordance with the cost of conveyance; and over a long course of years the fixation of the quantum of any rate has come more and more under the discretion of the goods manager of each railway company concerned.

Many textbooks or treatises upon railway rates speak of the method now so generally adopted in the compilation of British rates as being based upon the principle of "what the traffic will bear "; no two writers, however, seem to be agreed as to the meaning of the phrase, which must vary within very wide limits, according to whether the subject is being looked at from the point of view of the trader, or the railway company, or according to the viewpoint of rival carriers.

The phrase is a very plausible one, but the writer has never been bold enough to claim for it the dignity of a principle; at best it can be used to describe euphemistically a method which has mainly departed from anything which can be called principle.

A cursory glance at any station rate book (i.e. the official book kept at every station which records for traders the rates and charges made upon traffic forwarded from that station) will show that all rates are classified either as class rates or as "exceptional" rates. It has been variously estimated that of rates upon the rate books in regular use

80 to 90 per cent are for traffic *at exceptional rates*. In a very real sense the exception has become the rule in British railway goods rates.

Under a competitive system a goods manager has been in the past largely brought up to regard his main function as that of securing traffic for his company. "Get traffic—by fair means, certainly, if that be possible, but at all hazards secure the traffic"

THE PRACTICE NORMALLY ADOPTED

The practice actually followed may be illustrated thus: A trader builds a new factory or works, let us say, for the manufacture of jam. When he has decided upon his new enterprise he consults the railway company, telling them what he proposes, where he expects to find his markets for jam, from what places he expects to draw his raw materials, including, in the first instance, the bricks, timber and other building materials for the factory; and he then arranges with the company's goods manager the lowest charges he can induce that officer to grant. The latter then refers to the various sending places already existing for the same materials, and the various ports or consuming points to which the finished products are expected to be sent, and will give to the trader the best figures that he can—or rather such as he considers fair figures in relation to existing traffic that is already moving. The trader will also endeavour to get special terms in consideration of large quantities which he proposes to send as one consignment, and he may induce the railway company to give special terms for large or regular contracts over a period. Having made satisfactory arrangements, he goes on with his enterprise. The only weapon that he has to employ when negotiating is that unless he can induce the railway company to quote him figures that he considers reasonable, after having calculated all his costs, he will be unable to go on with the enterprise, and may have to consider establishing his works on some rival company's territory. In

other words, the basis which must be adopted is that of "what the traffic will bear."

As soon as the goods manager or his rates office assistant has fixed up an exceptional rate for any commodity between specific stations, the stations concerned are advised and the rate is entered upon the rate books of the stations concerned. It will be easily understood that under this method of procedure rates for all kinds of commodities are recorded in the books fixed on a great variety of reasons—competition with other carriers, both by land and water, comparisons with other rates for the same commodity for similar distances, comparisons with analogous commodities, the likelihood of a given figure promoting enterprise and many other considerations.

Perhaps the most potent factor taken into consideration is that of a comparison of charges on the same traffic over distances which may affect the trade in competition, and thus it will be understood how one reduced rate given under exceptional conditions so constantly becomes a precedent for other rates in other directions for the same or similar traffic being proportionately reduced, often in connection with new trades which spring up, the likelihood of whose existence never entered the mind of either railway company or trader when the original "precedent" was agreed upon. Thus have the rate book entries become, to a very large extent, a record of exceptional rates, apparently without principle or method.

What justification does, in fact, exist for the present practice it will be for the reader to determine after he has perused carefully the pros and cons as they are presented in the pages which follow

FUNDAMENTAL PRINCIPLES IN RATE-FIXING

Are there then no principles, we may ask, before we conclude this introductory chapter, upon which our system of rates charged has been built up? Yes, indeed, there are, and though it may be that for the time being they are the

more honoured in the breach than in the observance, as principles they are clear enough and will continue to assert themselves as considerations which must be regarded and observed.

A fundamental principle which runs through all quotation of rates and which is embodied in more than one Act of Parliament is that which prohibits the giving of any undue preference to any individual trader or traders. (In other words, every trader must have equal treatment and equal opportunity.)

It was to secure this equal treatment and the prevention of undue preference that the Railway and Canal Commission was first established in 1873, and this function has always been one of its primary duties.

A second principle is that of publicity. All railway rates arrangements must be accessible to the trading public; there may be no secret arrangements of rebate or discount or special terms to individuals. (This follows almost as a corollary to the first principle, for equal treatment all round can only be secured by arrangements being known and published.) So, as will be explained in due course, all rates and charges, whether scale or class rates on the one hand or exceptional rates on the other, must be published at the stations where they become operative, in a book provided for the purpose. This is a statutory provision first laid down in the Railway and Canal Traffic Act of 1873.

[Rates, moreover, must be reasonable, and facilities for traffic must be adequate.] These two principles have been embodied in railway legislation from the early days of railway existence.

The Railway and Canal Traffic Act of 1854 forbade discrimination¹ or the giving of any preference to any individual trader or description of traffic; and it also required the companies to give all reasonable facilities for traffic.

The appointment of the Railway Commission in 1873

¹ In the U.S.A. the term "discrimination" is regularly used for what in this country we call undue preference in favour of or against any trader.

was made by Parliament with the definite object of seeing that these legislative principles or requirements were given effect to. The constitution and work of this Commission are referred to in Chapter X

SUMMARY ✓

We may, perhaps, best summarize the principles which have been woven by successive Acts of Parliament into our constitutional system, and which underlie all our rate-making arrangements, thus—

The railways of the country must provide adequate travelling and transport facilities for the commonwealth

All charges made upon traffic must be reasonable, and be impartially and fairly applied between trader and trader. There must be no undue preference.

There must be full publicity of facilities and of charges. A complete schedule of rates in operation from each station must be published and be accessible to inquiring traders, and there must be no secret rebates or reductions.✓

The Railway and Canal Traffic Act of 1888, followed by specific Acts prescribing maximum charges for each railway company in 1891 and 1892, co-ordinated and codified the rates and charges arrangements and, until the war period and the new Railways Act of 1921, these enactments have been the trader's charter of protection against undue charge or unfair treatment by the railway companies. The 1888 Act re-enacts the principles above set out and the 1891-2 Acts specify in respect of every commodity and class of goods what is the maximum charge which may be made. These Acts do not deal with passenger traffic. The provisions of the 1921 Railways Act refer, however, both to passenger and merchandise traffic; and the Rates Tribunal, established by the Act, and whose functions are hereafter described, are instructed to have regard to the means best calculated to ensure the maximum extension and development in the public interest of both merchandise and passenger traffic.

CHAPTER II

A STATION RATE BOOK

What is a Station Rate Book? If in this chapter we can satisfactorily answer this question we shall have got a good grip of the machinery of the system of British railway rates and charges, and it is important that before we proceed to discuss in detail the principles or bases on which our rate system has been founded, we should have a clear visualization of what that system is. The system centres round the station rate book; and it is our first duty, therefore, to understand what a rate book is and how it has come into being, as it exists at every railway station in the country to-day.

Every railway company is required by statutory enactment to keep a book or document open to public inspection, in which are recorded all the rates or fares applicable to traffic to and from the station, along with the classification applicable to such traffic. This requirement was originally laid down in the Regulation of Railways Act, 1873 (Sect. 14), and repeated in Sect. 33, subsec. 4, of the Railway and Canal Traffic Act of 1888. The present rate books were brought into use on 1st January, 1893, new books being required after the revised rates were adopted, following the Magna Charta legislation in regard to railway rates of 1891-2. A sample double page of a standard rate book is set out on page 10.

EXCEPTIONAL RATES

Before describing in detail the functions of the rate book, however, certain preliminary facts and considerations which affect the whole system must at the outset be recorded. The first important fact is that the great proportion of railway goods traffic in the British Isles is charged not upon scale or tariff, which would seem a natural arrangement, but

under a system or method of exceptional rates, fixed in every case upon a consideration of all the circumstances and conditions under which the particular traffic is, or is to be, carried. In the 1920-1 proceedings before the Rates Advisory Committee it was assumed that 80 or more per cent of the railway traffic was carried at these exceptional rates.

At a later stage we shall consider the principles and bases underlying our present methods and arrangements; and here we would only set out concisely the main principles behind the provisions laid down in the statutory enactments. These main principles may be summarized in the words reasonableness, impartiality and publicity.

Reasonableness. All rates and charges are assumed to be reasonable, and it is expressly provided by public enactment that a railway company must provide reasonable facilities and services. Its rates and charges therefore must be reasonable.

Impartiality. In arranging rates and charges upon traffic there must be strict impartiality. No undue preference must be given in favour of any particular trader or group of traders, or in favour of one place against another place.

Publicity. All arrangements as to rates and charges must be open and above board. There must be no secret rebates. A book or document must be kept at every station or place at which traffic is received or dispatched, in which is recorded for public inspection all the rates and charges applicable to or from that particular station or place. This is the book which, under the name Station Rate Book, we are to discuss in further detail in this chapter.

BASIS OF RATES

So much for principles. Now as to the bases upon which our rates are fixed. They may be stated under two heads. The circumstances of traffic conveyance in Great Britain are highly competitive and, under the influence of

Between and		Distance	CLASS RATES PER TON (Subject to Conditions set out on pages										EXCEPTIONAL RATES PER TON. (Subject to conditions set out on pages ... unless otherwise noted)			
		M Ch	A OW		B OW.		C				1	2	3	4	5	
			4 tons.	6 tons.	4 tons.	6 tons	2 tons	4 ton load.	s. d	s. d						
			s d	s d	s. d	s. d	s d	s d			s d	s. d	s d	s. d	s. d	s. d

(Printed list of
stations set
out here)

competition, the rates charged to traders and recorded in the station rate books are either charged—

(a) Upon a tariff or scale so framed as to vary in direct relation to the distance, or

(b) By departure from the regularly recognized scales based on mileage, at the discretion of the goods manager or other officer of the company after a consideration of all the circumstances affecting each case. [This method of dealing singly with specific cases is proclaimed or recognized in America as "discrimination," and prohibited under Interstate Commerce Law.]

In both America and Great Britain it should be noted, that in this matter of rate making much more elasticity is allowed to the railway company and its agents than on the Continent. The German system is a system of tariffs, and if the circumstances of any specific commodity call for exceptional treatment, an exceptional *tariff* is arranged accordingly for the commodity. This, however, it must be noted, is a tariff for the commodity *as a whole*, and applicable generally, instead of a specific exceptional rate for an isolated case available between a particular pair of stations.

A RATE BOOK DESCRIBED

Now let us look at the rate book. On the left-hand side are the class or scale rates; on the right-hand page the exceptional rates, or at least the columns where, if necessary, such are recorded. These are the two main divisions which have already been indicated. On the left-hand page are recorded in order of the columns: (1) List of stations placed usually in geographical order, line (main or branch) by line; (2) The distance from the station where the rate book is located to each station named in the first column; (3) The eight classes, subdivided A, B, C, 1, 2, 3, 4, 5: these are subdivided, as regards classes A, B, and C, for minimum loads, as shown. The arrangement of the columns is as set out on the opposite page.

On the other side—the right-hand page—are a series of blank columns, in which are recorded such exceptional rates as exist to any of the stations named on the opposite page, with the conditions applicable thereto. They might be filled up as indicated below—

EXCEPTIONAL RATES					
Iron Segments London 10/- S.S. O.R. 40 wagons 8 tons each 110,000 tons per annum		Butter to Bradford 9/3 2 tons C.D. O.R.			

In the case of butter to Bradford, recorded as above, an exceptional rate of 9s. 3d. per ton is quoted to apply to traffic going in not less than 2 tons at a time. The letters C D., O.R., mean respectively that the railway company undertake the services of collection and delivery, and that the condition of owner's risk is attached in respect of the low rate quoted; that is, that the owner or consignor undertakes the risk in case of damage or loss in course of transit (unless such damage or loss is the result of wilful negligence on the part of the railway agents).

COLLECTION AND DELIVERY

The practice with British railways being to perform cartage in collecting and delivering goods to be forwarded, or having been forwarded, by railway in connection with a large proportion of traffic, it is essential in quoting exceptional rates to have a clear understanding whether or no such services are included when the rate is compiled and quoted. If they are not, then the rate is said to be "S. to S.," i.e. it only operates from station to station: if the railway is to undertake cartage as well as railway conveyance, then the rate is a C. and D. rate. All railway rates fall into the one category or the other, though sometimes

the cartage is performed at one end only ; then the rate is " collected " (C.) or " delivered " (D) only.

As regards the scale rates, it is regularly understood that the rates for traffic in classes A, B and C are, as a rule, S. to S. rates, and those in classes 1, 2, 3, 4, 5 are C. and D. and the railway companies will collect and deliver at all stations at which they possess the necessary carting equipment.¹

OWNER'S RISK AND COMPANY'S RISK

The other important condition which needs to be quoted with each exceptional rate is that of O R or C.R. As the exceptional rate is quoted as a low rate and, therefore, a " concession " to a trader, the practice has grown up of fixing upon the trader the risk of loss or damage in connection with or during transit ; so that whilst the normal or class rate is a company's risk (C.R.) rate, a very large proportion of the exceptional rates are O.R. rates. In all such cases it is essential that the condition be clearly recorded.

QUANTITY CONDITION

One other condition is of importance, viz., the quantity condition. The principal condition under which exceptional rates are given is that there is a regular and constant quantity of traffic to flow, and a stipulation is usually made that there must be at least 4 tons (in certain cases 2 tons, and sometimes 5, 10, or even 20 tons) Any quantity condition of this kind needs to be recorded. Occasionally, a very much reduced rate will be given for a train load consignment, as set out in the case of iron segments, Stockton to London, shown in the table above. But these train load conditions are entirely exceptional in England.

These main conditions of carriage, applicable to traffic conveyance in England, are dealt with at greater length in subsequent chapters.

¹ On a portion of the Southern Railway Company's system there is an important exception to this general rule (see page 138).

THE EIGHT CLASSES

It will have been noticed that the class rates are set out under eight classes. This is the classification agreed upon in 1891 and made uniform by parliamentary enactment, and obligatory upon all railway companies under the various railway companies' specific Acts of 1891 and 1892. All commodities that are conveyed or may be conveyed by railway in Great Britain are, with the exception of dangerous articles and unwieldy articles or articles of other exceptional nature, classified under the eight classes and, apart from an exceptional rate having been specially arranged on any traffic, it falls to be charged under the class rate, according to its classification.

In Great Britain the lowest charges are the A, B, C, then 1, 2 up to 5, the highest class goods. In America it is the converse, class 1 being the class charged at highest rate. The question of classification is explained in detail in the next chapter.

DISTRIBUTION OF RATE BOOKS

Every station has its rate book, and a duplicate copy of every station rate book is kept in the rates office—generally a department or section of the goods manager's office—of each railway company. The book itself is a volume of no small size, resembling a heavily bound ledger, and as, in a large company like the (former) Midland Railway or the London and North Western, there will be six or seven hundred stations, some idea may be formed of the extent of the library shelves necessary to contain and accommodate with ready accessibility so extensive a library. But there are more of these volumes than the foregoing description indicates, for at every station there are two main books, and often several minor volumes. Every station has one book for the stations on its own company's system, known as the "local rate book," and a second book for all rates noted or in existence to stations

on other, or "foreign" (as they are called), lines: this is the foreign rate book.

More than this, there are at each station rate books for passenger train traffic, and some companies have also a live stock rate book and a mineral rate book. The practice also exists at many stations of having a special rate book for rates to and from stations in Ireland. Every station rate book has its duplicate in the rates office repository at the railway headquarters.

We have stated that the present rate book system dates from 1893. There was, however, a proviso¹ in the parliamentary enactments at the time when these charges came into being, to the effect that all the rate books *in existence in December, 1892*, were to be retained at the head offices of each company for inspection by traders when and if required. This proviso further increases the dimensions of the rates office libraries.

RECORDING OF NEW RATES

We have said that the books must have easily accessible accommodation; this is because they are constantly in use. New and revised rates are being quoted in great numbers day by day. Every new rate must have the sanction of the head or central office, and as it is quoted to the station the necessary entry is made in the rate book.

The process is usually as follows. A trader who is opening a new factory, or who has got an order for goods to a distant station to which he has not been accustomed hitherto to send, applies for a rate. It may be, for instance, Dundee to Bedford, for confectionery; the trader is told at his station by the local agent that as confectionery (in boxes or cases) is in class 2 the rate is 83s. 4d. per ton C. and D. He says to the railway agent, "I cannot send at this rate, it is a prohibitory figure, but if you can agree to 63s. per ton I shall probably be able to send substantial consignments every fortnight." As the 83s. 4d. rate is

¹ Railway and Canal Traffic Act, 1894, Sec. 1, Subsec. 2

applicable to any quantities over 3 cwt., the railway agent, after consulting his head office, probably receives authority to quote the 63s. figure, on the understanding that the traffic goes in 4-ton lots at a time, and that the sender is willing to take any risk that may arise from loss, damage or delay. The quotation is then made to the trader by letter in form as follows—

I beg to quote you revised rates for the conveyance by ordinary goods train of the traffic referred to in our previous correspondence as set out below. The rates are quoted subject to alteration from time to time and to the Company's present and future notices and conditions of carriage.

Here the rates and conditions are set out in detail.

As soon as any traffic begins to pass, the local agent advises his chief, and he will then receive an advice worded somewhat as follows—

TO THE GOODS AGENT AT DUNDEE.

Please enter in your rate book the following rate and conditions to take effect on and from 192 .

Asst Goods Manager

Distance	Between Dundee & the under-mentioned stations.	Class Rates per Ton.								Exceptional Rates per Ton.	
		A	B	C	1	2	3	4	5	Confection-ery (in boxes or cases).	
Miles 400	Bedford									63/- C. & D O.R. 4 ton min	

All the figures given above are supposititious.

At the same time that the advice is sent from the goods manager's office to the local station (Dundee) the former arranges for the Dundee rate book in his custody to be altered to correspond exactly with the book at Dundee station.

The degree of authority in negotiation which is allowed to the local station master varies not a little under the different companies' methods. With the larger companies the rule is a very rigid one that any inquiries in regard to new rates or revision of rates must at once be referred to headquarters; but wherever it is possible to devolve authority upon local or district officers in this matter, it is very desirable that this should be done—and more especially now that the company systems have lately increased in size to such an extent. Care needs, of course, to be taken that a proper record of all alterations is registered in the head rates office.

GENERAL CONDITIONS

The station rate books usually contain by way of preface or preliminary explanation a list of conditions and regulations applicable to a variety of different kinds of traffic. There are many commodities which can only be dealt with outside of the regular classes we have referred to, e.g. timber, boilers of large dimensions, gunpowder and dangerous goods, wild animals, carriages, etc.

Some companies have adopted one or more special scales of charges for traffic on their own line—agricultural traffic, manures, hay, straw, grain, turnips, carrots, etc., and in this case the local scale will be inserted at the beginning of the local rate book at every station on the system, so that it is accessible for ready reference by any trader who desires to consult it. There is no need to enter rates made up on these scales in the body of the rate book.

IMPENDING CHANGES : THE 1921 ACT

It would seem desirable before concluding this chapter descriptive of a rate book to add a few comments in view of and *à propos* impending changes, for the revision of the whole system of railway charges now under consideration, as required by the 1921 Act, is of a fundamental character.

Already Parliament has, on the advice of the Rates

Advisory Committee, enacted certain changes which will profoundly affect the rates charged by the railway companies all over the country, and not only the rates, but the rate book conditions themselves. Amongst these changes the principal are—

All standard rates are in the future to be quoted on the basis of station to station, and any charges for cartage are to be made separately.

Where cartage charges are made, they must be separately assessed and separately noted in the public rate books or announcements.

The classes in the classification (not including coal and coke) are to be extended from 8 to 21, and coal and coke are to be dealt with as a separate class

All normal rates are, with slight exception, to be quoted on a company's risk basis ; and where O.R. rates are quoted as well as C.R. the difference is to be on the basis of the value of the risk from which the company is relieved.

The standard rates and charges to be made by every railway company shall show separately (*a*) the amount charged for conveyance, and (*b*) the amounts included in the rate for terminal accommodation and for the terminal services of loading, covering, uncovering and unloading.

The putting into effect of these decisions must mean a complete revision of our present rate books and it would, on the face of it, appear to require a scrapping of the present books and the creation of an entirely new set.

CHAPTER III

CLASSIFICATION OF COMMODITIES

THE first step towards the imposition of rates for the conveyance of traffic is the compilation of a careful classification of the articles and commodities likely to be conveyed by rail. The name of these is legion. Enter any town goods station and survey the loading platform or bench to or from which goods are unloaded from or loaded into goods wagons, and what a heterogeneous medley meets the eye—apples and aeroplanes, butter and beehives, eggs and elephants, oranges and ostrich feathers, pianos and perambulators, live rats and dead meat, coal, coco-nuts, cotton and cigars; indeed, practically every article one can think of has to be provided for, for all alike travel by rail at some time or other. Any of these things and thousands more may be looked for and found in the General Railway Classification of Goods—popularly known amongst railwaymen as the G.R.C.—issued by the Railway Clearing House. This book now contains some 3,200 articles, placed in the eight classes referred to in the previous chapter—A, B, C, 1, 2, 3, 4, 5.

From the inception of the railway system in England there has always been a classification of goods; in the earlier railway days trouble arose from there being so many different and varying classifications applicable to different railways.

EARLY CLASSIFICATIONS

The Stockton and Darlington original Act of 1821 has already been referred to in Chapter I. In this Act, as explained, we have three classes of goods (see page 1), or in the original Liverpool and Manchester Act of 1826, on the other hand, are five classes or categories quite

differently arranged from the Stockton and Darlington, namely—

1. Lime, limestone, dung, compost, manure, materials for road repair, stone, sand, clay, building pitching and paving stones, tiles and slates, timber staves and deals.
2. Sugar, corn, grain, flour, dyewoods, lead, iron and other metals.
3. Cotton and other wool, hides, drugs, groceries and manufactured goods.
4. Wines, spirits, vitriol, glass and other hazardous goods.
5. Coals, coke, culm, charcoal and cinders

The Great Western Railway Act of 1835 had four classes of goods in which most of the articles above set out were recorded, but under a quite different arrangement as between classes, and some additional commodities were named.

These illustrations from the early Acts of Parliament serve to show how differences of classification came to be established in different parts of the country; and the list of commodities named in the railway classification kept growing as new railway Acts were passed, or as fresh commodities were specified in the interpretation of the more general phraseology of the earlier Acts.

UNIFORMITY OF CLASSIFICATION, 1892

A great step forward was accomplished in the proceedings before the Board of Trade Committee, following the Railway and Canal Traffic Act of 1888, when a uniform classification obligatory on all railway companies alike was determined upon. Such achievement, however, was not effected without prolonged and laborious efforts on the part of parliamentarians at the instigation of a long-suffering traders' public. As the railway systems grew from being a few isolated and detached lines in different parts of Great Britain to the proportions they had acquired by the middle of last century, when they became a more or less continuous network of systems reaching to every part of the country,

and the practice of granting through rates over two, three or more systems came into existence, the difficulties and anomalies arising from differing classifications of goods may easily be imagined. In 1872 a select committee of the House of Commons, whose report formed the basis for the Regulation of Railways Act of 1873 (the Act which created the body of Railway Commissioners), recommended that 'a uniform classification was both desirable and practicable. The proposal seems to us now an eminently enlightened and simple one; but the parliament of that day thought otherwise and refused to give effect to it. This disposed of the question for a few years, but railway matters were coming more and more to the front in the political arena, and when a parliamentary committee was appointed in 1881 to inquire carefully into the working of the 1873 Act, the question of a uniform classification was naturally again to the fore, so that the great Act of 1888 definitely required that uniformity be adopted. The proceedings immediately following this Act as affecting rates and charges and classification will be referred to later, when we deal with the question of maximum rates, and here we need only record that the uniform classification was agreed upon by the various railway systems in the committee proceedings of 1889 and 1890, and was embodied in the series of special Acts of 1891 and 1892, which became the rates charters of the British railway companies. The railway companies having termini in London were dealt with by Parliament in 1891, and the northern companies—North Eastern Railway, Lancashire and Yorkshire Railway, and Scottish Railway Companies were completed in 1892; one year having been found to be insufficient to deal with all the various companies concerned.

In 1830, when the Liverpool and Manchester Company came into being, there were not more than 100 articles classified in the railway schedules; in 1874, in the early days of the Railway Clearing House, it was estimated that the list had extended to 300 articles; in 1892, when the

uniform classification came into effect, 2,200 articles are said to have been included ; and to-day it is probable that there are at least 1,000 more, if anybody would take the trouble to count.

Many additional articles are year by year included in the list, as, for instance, during recent years such articles as speedometers, silica ware, wheels for motor vehicles, cadmium metal, aeroplanes, etc., have been added.

SPECIMEN PAGE FROM THE G.R.C.

We may now give, selected almost at random, a sample page of the G.R.C. A perusal of this page will reveal the general method of use of the G.R.C. and some of its complexities.

The main object of this document, the G.R.C., is to give to senders of goods or to the trading public at large the class in which any specific article is included, so that the inquirer may know the rate at which any particular article or commodity should be charged. If he is, for instance, interested in metal helmets he turns to the article in the alphabetically arranged list under " helmets " and discovers that they are in Class 3, packed in cases or boxes. The rate book at any station (as explained in the last chapter) gives the rate on each class of goods in its appropriate column.

EXAMPLES FROM EACH CLASS

All the commodities that are or may be conveyed by railway in Great Britain are grouped in the eight classes A, B, C, 1, 2, 3, 4, 5, and below are set out typical articles in each of these groups—

- | | |
|---------------------------|-------------------------|
| A. Coal and coke. | 3. Confectionery in |
| B. Bricks and road stone. | hampers. |
| C. Grain, hay and straw. | 4. Salmon. |
| 1. Paper : sugar in bags | 5. Sealskins (when made |
| and cases. | into articles of |
| 2. Bread. | wearing apparel). |

SPECIMEN PAGE FROM CURRENT "CLASSIFICATION"

104 GENERAL RAILWAY CLASSIFICATION OF GOODS, 1922

	Class.		Class.
Hawkers' Packs and Trusses	4	Hazel Pine—(see Timber, pp. 232 to 235)	
Hawfers (Wire Rope), on reels, with winding machinery attached	3y	Heads, Mattock, iron or steel (Exceptional rates for Hardware apply)	1
Hay—		Heads and Blocks, Broom and Brush, wooden, without hair	1
Hydraulic or steam press-packed	C	Heads and Blocks, Broom and Brush, e o h p.	3
Machine pressed (not hydraulic or steam pressed), minimum 2½ tons per truck, exclusive of labour	C	Heads and Staves, prepared, for casks	C
Not to apply to Hay that has not been compressed by the actual use of a compressing machine		Heads, Figures, and Flowers wax	5
Machine pressed, minimum 40 cwt. per wagon	1	Heads for Orion, Sirius, and Venus or Vulcan Patent Safety Electric Fuses—(see Special Classification, p. 336)	
E o h p., minimum load 30 cwt. per wagon	2	Heads for Torpedoes, Phosphor Bronze and Steel	2
Hay and Straw, chopped, without other ingredients, in bags—		Headstocks, iron or steel for Collieries	1
Minimum 50 cwt. per truck, exclusive of labour	C	Healds and Reeds— Packed in cases	2
(Exceptional rates for Hay and Straw in Class C apply)		Not packed or in bundles	3
Minimum charge as for 2 tons per wagon	C plus 25%	Hearth Rugs	3hd
In less lots than 2 tons	1	†Hearths (Smiths') iron or steel	1i
Hay and Straw, chopped, mixed with articles in the Grain List (Provender), in bags—		Hearths, Tiled (not art tiled)	3y
Minimum 50 cwt. per truck, exclusive of labour	C	Hearthstone, in the rough, in bags or casks	B
In less lots than 50 cwt.	1	Heater Bottoms, iron or steel	Cs
Hay Forks, in bundles	3y	Heaters, Box Iron	1
„ in cases	2	Heaters, Expanding, Feed-water—(as Boilers)	
Hay Meal—(see Meals)		Heaters (Oil Fuel), cylindrical, cast iron, for fitting to Boilers	1y
Hay-pressing Machines—(see Agricultural Engines, &c., p. 226)		†Heaters and Stoves, electric, cast iron, or sheet steel	3s
Hay Rakes, Hand, in cases	2	†Heaters and Stoves, electric, e o h p.	4s
„ „ e o h p.	3	Heel Balls, Shoemakers'	3
Haylite Nos. 1 and 2—(see Special Classification, p. 327)		Heels, Boot, Wooden Blocks shaped for, packed	2
		Heels and Soles, Boot and Shoe Leather (as Undressed Leather)	
		Helmets, Felt, in cases or boxes	4
		Helmets, Metal, in cases or boxes	3
		Helves or Tilt Hammer, iron or steel	Ct

† If not properly protected by packing to be only accepted at Owner's risk:

y, Hardware List.

hd, Heavy Drapery List.

i, Iron and Steel List

y, s, Reduced rate at Owner's risk

In considering how to build up a classification, it will be seen at once that a great variety of circumstances have to be taken into account: indeed, a pronouncement by the Inter-State Commerce Commission of America (for America has a similarly constructed classification to our own) states: "In making this classification all the considerations that can properly bear upon it are supposed to be taken into account, and they are severally given such weight as the carrier believes it is proper to allow them; they are based on an almost infinite variety of circumstances."

A PARALLEL FROM U.S.A.

With such a problem before him we may, indeed, have much sympathy with the goods manager of a railway company who has this "infinite variety of circumstances" to take into account.

The problem in America is very similar to that of ours at home, and so well and interestingly is it set out by Professor Ripley in his book, *Railroads Rates and Regulations*, at the opening of the chapter on "Classification," that we copy, with his leave, the extract in full—

Imagine the *Encyclopaedia Britannica*, a Chicago mail-order catalogue, and a United States protective tariff law blended in a single volume, and you have a freight classification as it exists in the United States at the present time! A few selections from the first and last items of such a document are reproduced on the preceding pages. They give some idea of the amazing scope of trade. Such a classification is, first of all, a list of every possible commodity which may move by rail, from academy or artist's board and accoutrements to xylophones and zylonite. In this list one finds algarovilla, bagasse, "pie crust, prepared"; artificial hams, cattle tails, and wombat skins; wings, crutches, cradles, baby jumpers, and all; together with shoo flies and grave vaults. Everything above, on, or under the earth will be found listed in such a volume. To grade justly all these commodities is obviously a task of the utmost nicety. A few of the delicate questions which have puzzled the Inter-state Commerce Commission may give some idea of the complexity of the problem. Shall cow peas pay freight as "vegetables, N.O.S., dried or evaporated," or as "fertilizer"—being an active agent in soil regeneration? Are "iron-handled bristle shoe-blackening daubers" machinery or toilet appliances? Are patent medicines distinguishable, for purposes of transportation, from

other alcoholic beverages used as tonics? What is the difference, as regards rail carriage, between a percolator and an everyday coffee pot? Are Grandpa's Wonder Soap and Pearline—in the light of the claims put forth by manufacturers, suitable either for laundry or toilet purposes—to be put in different classes according to their uses or their market price? When is a boiler not a boiler? If it be used for heating purposes rather than steam generation, why is it not a stove? What is the difference between raisins and other dried fruits, unless perchance the carrier has not yet established one industry while another is already firmly rooted and safe against competition?

FACTORS AFFECTING CLASSIFICATION

It will be surmised at once, when we see coal at one end of the scale and sealskins at the other, that the value of the article in question is a very large factor in the determination of its rank in the scale of classification, and probably the next factor of importance is that of the cost of handling. Large and awkwardly-shaped articles will rank high in class: tables, chairs and perambulators, whose bulk is out of proportion to weight, will also be placed in a high class; turnips, as easily-handled articles, will be placed low, whilst hothouse fruit is placed in the highest class—5.

The main factors that have in the past been taken into account may be set out as follows—

- (a) Value of commodity.
- (b) Cost of handling
- (c) Damageability.
- (d) Method of packing
- (e) Size or bulk in relation to weight

A critical examination of these factors will, however, show that apart from the question of value of commodity, they practically resolve themselves into considerations of cost of dealing with the article.

The consideration of packing is an important one, and many articles are classified in two or three classes, varying according to their packing; olive oil, for instance, in casks or iron drums is in Class 1; otherwise it is Class 3; mineral waters in casks is Class 1; otherwise it is Class 2. The word "otherwise" is imported into the G.R.C. in a new

guise as "e.o.h.p." (except otherwise herein provided) It is so embodied in parliamentary enactments and, as a technical railway phrase, has "come to stay."

In the sample page (30) the classification of hay may be noticed. if it is press-packed it is charged at a distinctly lower rate than if it is loaded into a wagon loose and not packed. Hydraulic or steam press-packed, it is in Class C, machine-pressed, with a minimum of 2 tons per wagon, it is in Class 1, otherwise it is charged at Class 2 rates. Hay, therefore, is included in three classes, according to its conditions of packing, and so with many other kinds of commodity

THE PROPOSED NEW CLASSIFICATION

A revision of the classification of commodities was the first subject which was undertaken by the Rates Advisory Committee in the revision of rates now pending. It was commenced by the committee in 1920 and, when the 1921 Railways Act was passed, this "Advisory Committee" was retained to complete the new classification, the substance of which, it was decreed in the 1921 Act, was to be adopted as the basis for future merchandise rates. In place of the eight classes previously referred to, the classification provides for twenty-one classes of general goods, coal being treated separately, and referred for special adjudication to the tribunal, so making twenty-two in all. The main principle aimed at in the revision was simplification, though whether this important principle is to be found in the substitution of twenty-two classes for eight remains yet to be proved. The underlying idea of the increased number of classes has been that many of the exceptional rates will fall into one of these scale classes, and so coming within the range of a regular tariff the rate as an exceptional one disappears.

It is provided in the 1921 Act, as regards classification, that for the determination of the principle of classes in which a commodity is to be placed, regard shall be had to

the following factors, i.e. (1) value, (2) bulk in comparison to weight, (3) risk of damage; (4) cost of handling, (5) saving of cost when merchandise is forwarded in large quantities, in addition to all other relevant circumstances.

In an appendix (page 30) is given an extracted page from the new classification, which sets out side by side the old and the new, showing the description of change that is being given effect to. Reference to this page, will show that apart from the question of the goods themselves the commodity varies in the new classification, as in the old, according to the condition of packing, and also in relation to the quantities in which it is carried. Thus, taking hay or straw again by way of illustration, this commodity is entered in four different classes, i.e. Class 10, if it is loaded $2\frac{1}{2}$ tons per wagon; Class 12, if there are only 2 tons per wagon; Class 15, if there are 30 cwt. only in the wagon, and Class 18 for less quantities than 30 cwt. per wagon. But the other conditions in regard to how the hay or straw was to be packed, disappear. Vegetables again appear in three classes, 10, 12, or 14, according to whether they are in lots of 2 tons, 1 ton or less quantities. The classification of fruit extends over eight classes, the highest being for fruit grown under glass. This is in Class 20. Apples and pears are charged the least of all fruit and the other descriptions are classified as follows. Here also it will be seen that conditions of packing to some extent enter into the question--

	<i>Class</i>
Apples and pears	12
Bananas in 2-ton lots	13
Fruit, dried	14
Fruit, crystallized in casks or cases	15
Soft fruit generally	16
Bananas in 1-ton quantities	10
Crystallized and candied fruit in bottles or jars	16
Other fruit, such as strawberries and peaches	18
Crystallized fruit not otherwise specified	19
Fruit grown under glass	20

The Rates Advisory Committee when they set forth on their labours expressed a view that it would be well to

have a general provision for a percentage reduction to be applied to the normal scales for large quantities, say 5 tons, 20 tons, 50 tons, etc., and also that this should not be complicated with a consideration of 2 or 3 tons as being a large quantity. But as the complex circumstances were further considered, this view was abandoned, and ultimately the quantity condition was largely interpreted in terms of classification. It is doubtful, however, whether sufficient consideration has been given to this matter, especially when it is borne in mind what advantage accrues in many other countries by the adoption of regular reductions in rate for 5, 10 or 20-ton quantities.

Class 21, the highest, is also the smallest of the lists in the new classification. It contains only gold, gold leaf, gold precipitate, gold articles, platinum and platinum articles, silver, silver precipitate and silver articles and statuary.

The new classification which has been referred to was practically completed at the end of 1920, but cannot be applied in practice until the specific figures as to the rates to be charged are settled, and its coming into effect depends upon the decision as to an "appointed day." (See page 101.)

SPECIAL CLASSIFICATIONS

It should be added that there are a number of commodities or articles which, being of an exceptional nature, do not adapt themselves to the general classification. Rolling stock, for instance, has a classification and scales of charges standing by itself. So have the various kinds of returned empties; they fall into seven different classes or categories, each with its own tariff. Timber is dealt with sometimes by measurement instead of exact weight at a tonnage figure, and it has its own classification and scale.

These various commodities, which have special scales and classifications, are recorded in the same book as the general classification of goods, coming in at the end, and forming an integral part of the whole.

“ SMALLS ”

There is also set out a “ smalls ” scale. All goods under 3 cwt. in weight are treated differently from larger quantities, and charged at a percentage above the normal rate, which, in goods train service, only applies to quantities of 3 cwt. or upwards. The exact figures chargeable for these small quantities are worked out on a table known as the “ Smalls Scale ”

APPENDIX TO CHAPTER III

SAMPLE PAGE FROM BOOK SHOWING PRESENT AND PROPOSED CLASSIFICATION

PRESENT CLASSIFICATION		PROPOSED CLASSIFICATION	
	Class		Class
Hat Shapes (Buckram), nested and packed in boxes, cases and crates (as Light Drapery)		Hat Shapes, buckram or wire, nested and packed in cases . . .	19
Hat Shapes (Wire), nested and packed in boxes and cases (as Light Drapery)			
Hat and Umbrella Holders or Stands—		Hat and Umbrella Holders or Stands—	
Cast iron	3 ¹ / ₂	Cast iron or steel	18
E.o.h.p.	5	E.o.h.p. (as Furniture)	
Hat Cases, canvas, and matting covered, nested (as Trunks, Luggage, not basket)		See Bags, Cases, and Holdalls	
Hats—		Hats—	
Felt (Soft), in cases or boxes	3	Felt (Soft), in cases	18
Felt (Soft), e.o.h.p.	4	Felt (Soft), e.o.h.p.	19
Felt (not Soft), in cases or boxes	4	Felt (not Soft), in cases	19
Felt (not Soft), in Cardboard and Scaleboard boxes, packed in crates	5	Felt (not Soft), in cardboard boxes in crates	20
Rush and Willow Wood—		Rush or Wood—	
In cases, boxes, bales, trusses, hampers, or bundles	3	In bales, bundles, cases, or hampers	18
In crates	4	In crates	19
Straw	5	Straw	20
Haulage Gear for Collieries, without Motors, not packed	1	See Machines and Machinery	
Hay—			
Hydraulic or steam press-packed	C	Algerian Fibre	
Machine pressed (not hydraulic or steam press-packed), minimum 2½ tons per truck, exclusive of labour	C	Chaff	
Not to apply to Hay that has not been compressed by the actual use of a compressing machine		China Grass	
Machine pressed, minimum 40 cwts. per wagon	1	Codilla	
E.o.h.p., minimum load, 30 cwts. per wagon	2	Eusilage	
Hay and Straw, chopped, without other ingredients, in bags—		Esparto Grass	
Minimum 50 cwts. per truck exclusive of labour	C	Fern for litter or packing	
(Exceptional rates for Hay and Straw in Class C apply)		Flax Straw	
Minimum charge as for 2 tons per wagon	C plus 25%	Hay	
In less lots than 2 tons	1	Hay and Straw, chopped, in sacks	
Hay and Straw, chopped, mixed with articles in the Grain List (Provender), in bags—		Hay and Straw, chopped, mixed with articles in the Grain List (Provender), in sacks	
Minimum 50 cwts. per truck exclusive of labour	C	Megass	
		Mexican Fibre	
		Palmetto Leaf	
		Provender, Horse or Cattle	
		Reeds and Rushes.	
		Straw	
		Wood Fibre	
		Wood Wool	
		Min. 2½ tons per truck	19
		Min. 2 tons per truck	12
		Min. 30 cwts. per truck	15
		Less than 30 cwts. per truck	18

CHAPTER IV

SCALES AND TARIFFS

WE have in the preceding chapter dealt with classification of goods as the first factor necessary towards the establishment of any rate book system.

After classification has been determined the next important step in fixing rates is to compile scales or tariffs applicable to the various classes

VARYING DESCRIPTIONS OF SCALE

But we have explained that most of the operative rates are treated as "exceptional" and have been fixed by goods managers, according to their view of what the traffic will bear. Bearing in mind that one of the main tasks of the rates tribunal is that of trying to reduce the number of exceptional rates and arrange scales or tariffs which will absorb as large a proportion as possible of these rates now in operation, we must next consider the principles upon which scales are or may be based. We shall find these to be—

1. The equal mileage scale.
2. The tapering mileage scale.
3. The scale based on weight alone, regardless of distance.
4. The zone scale of charges.

In the early days of railway history it was clearly contemplated that railway rates and fares should be based upon tariffs arranged according to distance and weight, as when the Stockton and Darlington original Act provided that limestone should be charged at 4d. per ton per mile, other traffics, e.g. lead, iron bars, etc., at 6d. per ton per mile. So also in the Great Western Railway original Act of Parliament, coal and coke was to be charged $\frac{1}{2}$ d. per ton per mile (if conveyed in railway carriages $\frac{1}{4}$ d. per ton per

mile extra) ; wrought iron, 1d. ; sugar or corn, 2d. ; fish, 3d. per ton per mile, and so on. Most of these schedules of scales of charges in the early Acts of Parliament were based on equal mileage rates, i.e. the same charge for every mile—10d. for 10 miles, 20d. for 20 miles, and so on—as in the instances named above.

This arrangement of charging in accordance with a scale has continued as a practical principle ever since ; and on the face of it such an arrangement based upon weight and distance seems to fit in with our elementary ideas of what is reasonable, right, and just.

SCALES OR TARIFFS

Such a method of charge we call a scale or a tariff, and it exists to-day as the prime basis (though not practice) of our railway system of charges. In the latest statutory charges, fixed by Parliament in 1891-2 (now coming to an end), a system of scales is maintained throughout ; these, however (as in the case of all parliamentary charges), prescribe the *maximum* figures beyond which the railways are not allowed to charge ; and the operative figures for every class of traffic are likewise fixed on a scale whose figures are slightly within the maximum scale figures.

But *the* feature in the British railway rates practice, as already mentioned in Chapter I and more fully explained later (Chapter V), is that the scales have not been adhered to, excepting as regards a small proportion of the traffic conveyed, and all important traffic in Great Britain moves under exceptional rates.

The revision of our system which is now being carried out under supervision of the Rates Tribunal—a parliamentary procedure following upon and directed by the 1921 Railways Act—has as one of its main aims the simplification of the system and an endeavour on the part of the tribunal to get a larger proportion of operative rates upon a scale or tariff basis. Many of the exceptional rates now recorded on the books will automatically disappear as soon as the tribunal

has completed its revision labours. They will be abolished at the same time as the new rate system comes into operation, i.e. as from "the appointed day."

Tapering Mileage Scales. The new classification, we have already pointed out, has twenty-one distinct scales—twenty-two if coal be included as one—for the class traffic instead of the eight (A, B, C, 1, 2, 3, 4, 5) known so well to railway goods agents in the past, and these are to be continued under present proposals on the tapering basis. As a sample scale, we may give one of these scales as proposed by the railway companies by way of illustrating the nature of the scale. Articles in Class 10 (which includes such articles as chimney pots and prepared firewood) will be charged on a scale based as follows, viz. for the first 20 miles, 3½d. per ton per mile; for the next 30 miles, 2¾d. per mile; for the next 50 miles, 1¾d. per ton per mile; for the remainder of the distance, 1¼d. per ton per mile.¹ For sample distances the scale will give the following figures—

For	20 miles,	5/10	equal to	3.50d.	per ton per mile		
"	40 "	9/8	"	2.90d.	"	"	"
"	60 "	13/0½	"	2.60d.	"	"	"
"	75 "	15/2½	"	2.37d.	"	"	"
"	90 "	17/5	"	2.32d.	"	"	"
"	110 "	19/9½	"	2.25d.	"	"	"
"	130 "	21/7½	"	2.00d.	"	"	"
"	150 "	22/5½	"	1.80d.	"	"	"
"	250 "	31/7½	"	1.52d.	"	"	"

The figures in the third column above, indicating the charge per ton per mile, show clearly how a scale of this kind works out in a figure decreasing as the distance increases. Hence the name of "tapering," given to it during the Rates Advisory Committee proceedings. During the 1891-2 proceedings this form of scale was usually known as "cumulative"; but we shall probably in future call it "tapering," in contradistinction to an equal mileage scale, where the rate per mile continues at an even and unchanged figure.

¹ These are only proposals, not agreed figures, and are quoted to show the "tapering" scale.

In an appendix is set out the complete table of scales applicable under the 1891 and 1892 Railway Charges Acts to all the general goods commodities coming within the general classification of the eight classes. It again illustrates the tapering scale under which rates have been limited within a maximum since the beginning of 1893, and is now to be superseded ; but it is an interesting historic document, and the " tapering " principle in making up rates will, it is expected, be continued. The table is printed *in extenso* at page 39, as it appears in the parliamentary enactments, and it will be seen that it includes maximum figures for terminals, as well as for conveyance.

Equal Mileage Scale. The best sample we have of the equal mileage scale is that of our third class passenger ordinary fares, which in pre-war times had settled down to the regular figure of 1d. per passenger per mile. The same description of scale—subject to all kinds of exceptional or cheap fares being quoted, apart from the ordinary scale—has been adopted since the war, only at a 50 per cent higher basis, and it is embodied as a proposal in the new railway schedules submitted to the tribunal, thus—

First Class : 2½d. per mile ;

Second Class : 2d. per mile ;

Third Class : 1½d. per mile.

In pre-war days this equal mileage scale was in operation for other things, as, for instance, for horses, which were regularly charged at 3d. per horse per mile, carriages, 4½d. per mile ; corpses, 1s. per mile ; carriages running on their own wheels, 1s. or 2s. per vehicle per mile, etc.

There are two other types of scale on which charges are fixed, namely, that which ignores distance altogether and charges for weight or article irrespective of distance ; and the zone system of charging.

Scale Irrespective of Distance. This is the method we know so well in the Post Office, which charges for the conveyance of letters or printed papers the same figure for any distance not only within the country but within the

Empire, as well as to certain places outside, so that a letter will be carried from your own house to New Zealand or Bundarawela (in Ceylon) at the same charge as another letter destined for any one in the same town or in the street in which you live. The charge varies only in proportion to weight. So with parcels sent by parcels post; there is one figure, irrespective of distance, between any two places in Great Britain.

We have mentioned in another chapter (see page 58) the experiment started in America in regard to milk rates when the railways of U.S.A. charged a fixed rate per gallon for milk carried any distance, an experiment of great interest in its bearing on the development of traffic, but an experiment which was not permanent and became superseded by a zone system of charging.

The Zone Scale. The zone system of charging came into prominence in connection with an experiment promoted by the State railways of Hungary many years ago for the charging of passengers.

Both as regards passenger traffic and goods traffic the charges on the railways of Hungary in the pre-war period were based on a zone system, whose stages were at 5, 10, 15 (continuing in multiples of 5) kilometres from each sending town.

But we have many illustrations in our railway system of the zone method of charging. Perhaps the best known is the ordinary parcels scale (reproduced on page 38) for parcels conveyed by passenger train. It is graded in zones: (1) Up to 15 miles; (2) Above 15 and up to 30 miles; (3) Above 30 and up to 50 miles; (4) Above 50 and up to 100 miles; (5) Above 100 and up to 150; (6) Above 150 and up to 200; (7) Above 200 and up to 300; and (8) for distances over 300 miles the charge is the same, irrespective of distance, so that from London to Wick (750 miles) the charge is the same as from London to Berwick. This arrangement has the practical effect of "blanketing" the whole of Scotland as one zone, for

parcels from London, with one charge irrespective of distance. It is an interesting parallel with what we have referred to elsewhere in the way of a zone arrangement on a much larger scale in the United States, famous for so many big experiments, viz., the blanketing or zoning of all towns and stations in the Eastern States,—everything east of St. Louis, Chicago and the Mississippi in respect of all traffic sent to the Pacific seaboard. This arrangement is given effect to for the deliberate purpose of giving New York, Boston, Cleveland and producing centres in the East of the States some fair chance of competing with Chicago and towns in the Middle West in the markets of the Far West.

EXCEPTIONAL RATES V. SCALES OR TARIFF CHARGES

In the next chapter we shall consider the question of exceptional rates as opposed to scale or tariff charges. How far it is practicable to get back to the more decorous and more intelligible arrangement of charging upon consistent tariffs based upon weight or quantity and distance conveyed and available for any sender, actual or potential alike—the very question upon which the Rates Tribunal are to-day concentrating their main attention—is a problem which every student of railway economics as well as every practical railway officer or expert ought to carefully consider and endeavour to solve.

The Rates Advisory Committee began its deliberations with a firm determination that all rates on goods traffic should be made to conform to distance scales, modified probably, but on consistent lines, to meet varying quantities of traffic and according to conditions of risk, and although apparently they, or rather their successors, the Rates Tribunal, are now of the view that a large number of exceptional rates must be continued to meet the exigencies of trade requirements, they have announced their intention to get as many rates as is possible upon well-ordered

tariff lines, so as to leave the exceptional rates a greatly diminished quantity. The aim hereafter will, doubtless, be to reduce the exceptional rates still further and gradually to reach the vanishing point.

For the consideration of the practicability of adopting scales or tariffs for a much larger proportion of traffic the first stage is to realize the facts, first as to the varying descriptions of scale that are available, and, secondly, how far scales are in actual operation to-day.

Scales and tariffs, it should be remembered, are modifiable and not made of cast iron, any more than is a system based on exceptions.

We have up to now in this chapter used the expression "scales" or "tariffs" as though the terms were interchangeable. The difference in meaning depends very largely upon custom or use of the terms in different countries.

GERMAN RAILWAY TARIFFS

The term "tariff" is usually used in a more comprehensive sense. In Germany, where, broadly speaking, railway arrangements are more scientific and much less elastic than with us, tariffs abound in great number. In that country, if an exceptional rate for grain, or any other specific commodity, were applied for it could only be granted by a tariff reduction on the particular commodity available all over the country—not as an exceptional rate available between a particular pair of stations.

Some of the German States had their own tariffs applicable locally for different traffics; there were tariffs applicable between one State and another; other tariffs between Germany and Holland, Germany and Switzerland, and many inter-country tariffs; tariffs for wagon loads, tariffs for smaller quantities, and so on. In a report some years ago upon the German railway arrangements, made by one of our Board of Trade inspectors, it was stated that the number of tariffs regulating railway rates in Germany was no less than 529.

GENERAL PARCELS SCALE

Parcels conveyed by passenger train are charged at the following rates at Company's risk—

Lb.	Rate 1 to 15 Miles.	Rate, 16 to 30 Miles.	Rate 31 to 50 Miles.	Rate 51 to 100 Miles.	Rate 101 to 150 Miles.	Rate, 151 to 200 Miles.	Rate 201 to 300 Miles.	Rate, Above 300 Miles.
	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>	<i>s.</i> <i>d.</i>
1	0 7	0 7	0 8	0 8	0 9	0 9	0 9	0 9
2	0 8	0 8	0 9	0 9	0 9	0 9	0 9	0 9
3	0 8	0 8	0 10	0 10	0 10	0 10	0 10	0 10
4	0 8	0 9	0 11	0 11	0 11	0 11	0 11	0 11
5	0 8	0 9	0 11	1 0	1 0	1 0	1 0	1 0
6	0 9	0 9	1 0	1 1	1 1	1 1	1 1	1 1
7	0 9	0 10	1 1	1 2	1 2	1 2	1 2	1 2
8	0 9	0 10	1 2	1 3	1 3	1 3	1 3	1 3
9	0 9	0 10	1 2	1 4	1 4	1 4	1 4	1 4
10	0 10	0 11	1 3	1 5	1 5	1 5	1 5	1 5

(Scale gradations continued lb. by lb.)

101	2 4	3 9	6 11	9 0	10 0	10 11	12 9	13 6
102	2 4	3 9	7 0	9 1	10 1	11 0	12 11	13 8
103	2 4	3 10	7 1	9 2	10 2	11 1	13 0	13 10
104	2 5	3 10	7 2	9 3	10 3	11 3	13 2	13 11
105	2 5	3 10	7 2	9 4	10 4	11 4	13 3	14 1
106	2 5	3 11	7 3	9 5	10 5	11 5	13 5	14 2
107	2 5	3 11	7 4	9 6	10 6	11 6	13 6	14 4
108	2 5	4 0	7 5	9 7	10 8	11 8	13 8	14 6
109	2 5	4 0	7 5	9 8	10 9	11 9	13 9	14 7
110	2 5	4 0	7 6	9 9	10 10	11 10	13 11	14 9
111	2 6	4 1	7 7	9 10	10 11	11 11	14 0	14 10
112	2 6	4 1	7 8	9 11	11 0	12 1	14 2	15 0

Fractions of 1 lb are charged as 1 lb

The charges for weights exceeding 112 lb can be obtained on application at the stations.

APPENDIX TO CHAPTER IV

SCALE OF MAXIMUM CHARGES, LIMITING RAILWAY COMPANIES' POWERS TO CHARGE, ENACTED IN 1891-92 ACTS OF PARLIAMENT, NOW TO BE SUPERSEDED

Class	MAXIMUM RATES FOR CONVEYANCE				MAXIMUM TERMINALS			
	For consignments except as otherwise provided in the schedule				Station. Terminals at each end	Service Terminals		
	For the first 20 miles	For the next 30 miles	For the next 50 miles	For the remainder of the distance		Loading	Unloading	Covering
	Per ton per mile				Per ton	Per ton		
	d.	d.	d.	d.	s. d.	s. d.	s. d.	d.
A	1.00	0.85	0.50	0.40	3	—	—	—
B	1.40	1.00	0.80	0.50	6	—	—	—
C	1.80	1.50	1.20	0.70	1	3	3	1.00
1	2.20	1.85	1.40	1.00	1	6	5	1.50
2	2.65	2.30	1.80	1.50	1	6	8	2.00
3	3.10	2.65	2.00	1.80	1	6	1	2.00
4	3.60	3.15	2.50	2.20	1	6	1	3.00
5	4.30	3.70	3.25	2.50	1	6	1	4.00

Per ton.

Per ton

Per ton

Per ton

Per ton

Per ton

Per ton

Per ton

Per ton

Per ton

Per ton

CHAPTER V

EXCEPTIONAL RATES

It is inevitable in a survey of our British rates system of the kind we are attempting that we should dwell in some detail upon the growth and characteristics of exceptional rates, and especially upon the circumstances which brought them into being. It has been already pointed out that probably 80 per cent of railway-borne traffic is carried under the exceptional rates system, so that it is the exception that forms the rule, and an inspection of any official rate book will readily confirm this statement.

But let us recall the circumstances under which our large railway systems came into being and were evolved by slow degrees out of comparatively small companies.

DEVELOPMENT IN THE PAST

If we were to go back to the middle of last century we should find that, instead of a great railway system, there were a number of isolated railway lines which had grown up in different parts of Great Britain, and each of these railway lines, when it was initially sanctioned by Parliament, had scheduled to its original Act a classification of goods¹ expected to be conveyed, and a maximum figure of charge was fixed for each class of the classification. This legal maximum limited the capacity of each railway line to charge in an upward direction. A railway company might charge anything *below* the parliamentary maximum so long as it did not transgress the law of undue preference in favour of or against any trader, but it might not go above its maximum. So began in the earliest history of railways our régime of parliamentary control. The goods classifications of different railway lines moreover varied not a little, as we have already pointed out.

¹ *Vide* pages 19, 20.

It would be a mistake, however, to attempt any consideration of the present-day arrangements without bearing in mind the principles behind our present practices: principles which are either still observed or (perhaps more often) departed from, but which accounted originally for the reasons out of which the present practices have sprung. Very little reflection will show how entirely different this question of principle becomes, when instead of a few isolated lines dotted about the country the railway system has become one vast network of lines, all connected up and inter-related to each other as they are to-day. The question of uniformity of classification becomes urgent, and many questions of co-ordination are forced upon the attention both of the railway companies and the State. Competition, which was almost impossible with scattered and isolated lines, became not only possible but inevitable, and indeed became the main regulating factor in any question about the fixing of a standard rate.

Reverting for a moment to classification, which is dealt with in full in Chapter III, there are to-day eight classes of goods, i.e. A, B, C, 1, 2, 3, 4, 5, and to each of these classes a regular tariff, graded according to distance, is applied. It is fixed on what is known as a "tapering" scale, which term is given to indicate that for the longer distances the actual figure charged per mile is less than for the shorter distances.

EFFECT OF OVER-COMPETITION ON RATES

But these class rates, as they are called, based on mileage scales, are only charged on a comparatively small quantity of the traffic that passes over the British railways. The bulk of traffic, variously estimated at from 80 to 90 per cent, is based upon a system of exceptional rates. This is the great anomaly of the present British merchandise rates system, and is, perhaps, the most important item which is being dealt with under the revision which Parliament decreed in 1921, and upon which the Rates Tribunal are at present engaged.

We may well query what it is that has caused this wide departure from regular scales and tariffs, and which has led to a state of affairs in British railway rates which is not only anomalous, if not chaotic, but which was actually referred to by the leading counsel for the railway companies themselves, when the great inquiry took place before the Railway Rates Advisory Committee in 1920, as the "present higgledy-piggledy system." I believe we shall find the main cause of this anomaly to be in the present British system of exaggerated competition.

It is curious how this all-pervading rule of competition comes into effect. In the early days of railways the competition was with the pre-existing canals, but the competition was not of a very effective character. Until the scattered railway lines were linked up together there was no competition between railways, but as soon as they became so linked together competition became rife, not only as between railway and railway, but also as between railway conveyance and coast-wise sea competition, for in the early days in this country, as in most others, the railways were constructed in connection with the ports of the country and were the great gateway of foreign trade. Now it is the roadway transport that the railways think of first as the principal factor in competition. But there is much evidence for the conclusion that in the coast-wise sea competition is to be found the great factor that is responsible for the whole system of exceptional rates.

INTERNAL RAILWAY COMPETITION

If we may now turn again to internal railway competition, it has been constantly stated, and with a large amount of general agreement, in recent parliamentary and other discussions, that as between railway and railway in the past competition was commonly entirely overdone. This excessive competition was undoubtedly one of the main reasons which led to the extensive amalgamation of railway systems embodied in the 1921 Act of Parliament, and given effect to

as from the 1st January, 1923. This may be quoted as one of the latest illustrations of the truth, put into succinct language by that pioneer in railway matters, Robert Stephenson, who said, before a parliamentary committee, "where combination is practicable, competition is impossible." A reduction of the element of competition by a wide extension of combination between the railways themselves and the co-ordination of other systems, was the outstanding feature of that great and revolutionary Act of 1921.

We shall probably best understand how the principle of exceptional rates has grown up by considering two or three illustrations of these rates in actual practice. The first one I would give will show how competition has operated to overthrow any idea of principle in the fixing of a standard on which rates for merchandise shall be based. I refer to the case of sugar from the Greenock and the Clyde refineries to Midland towns in competition with sugar from the Thames refineries.

THE GREENOCK SUGAR CASE

The case is historical in the records of railway development. It loomed large in the great parliamentary inquiry of 1882. An application was made to the Railway Commissioners by the railway companies serving London and the Midlands, to restrain the northern railway companies from carrying sugar from Greenock to the Midland districts of England at the same rate—25s. per ton—that was being quoted and was in operation from London, alleging that it was quite unfair to the southern sugar factories, as the distance from Greenock to (say) Nottingham was just about double that from London. A protest was thus entered against the Thames refineries being deprived of "the advantage of their geographical position." The question affected some 39 towns in the Midlands, to which the average distance from Greenock was 292 miles as compared to 156 miles, the average distance from London. The rates on the long distance sugar from Greenock were 110gd.

per mile, while in the case of the London sugar the mileage rate worked out to 2'13d. The London senders, therefore, pressed that either the longer distance rates should be considerably raised, or else that the charges from London ought to be reduced.

The decision of the Commissioners was that it was a good thing that the Clyde sugar, although it had to travel double the distance of the sugar from London, should pay the same railway rate as the London sugar ; and this was confirmed by the parliamentary committee which specially considered railway rates in 1882. It must be noted, however, that whilst the judgment may be sound in the interest of the nation as a whole, regarded as consumers, it made an end practically once for all of any further attempt to establish railway charges for the conveyance of goods on a basis fixed *pro rata* to mileage.

In England, competition is undoubtedly a potent weapon for the good of the home trader in making for a reduction of charges. It certainly was so considered in 1882, for when referring to the sugar case above quoted, the committee in their report to Parliament, said—

It does not appear to our Committee that such a result (the shutting out of Greenock as against London in the Midland markets) is either just or reasonable. . . . Competition cannot but be advantageous to the public. That Greenock sugar refiners should be in the same market as the sugar refiners of London, whilst it may be to the disadvantage of the London refiners, must be to the advantage of the Greenock refiners, and cannot be a disadvantage to buyers of sugar

There are those who contend that railway charges should be based directly *pro rata* to distance carried. There are others who contend that they should be based upon the cost of performing the service of carriage. Either of these would be intelligible principles, but when competition comes in any question of principle seems to disappear. Says Sir William Acworth, in his book on *The Railway and the Traders*—

Once admit competition between two companies, and the whole theory of equal mileage or cost-of-service rates vanishes into air.

and again

British protagonists for the present system have fallen back upon the expression "what the traffic will bear" as being the only principle which can explain the present varied systems.

PROVISIONS AND DEAD MEAT FROM THE PORTS

The next illustration I would refer to is that of the cheap import rate for provisions, dead meat, and articles for consumption between Liverpool and London.

Many years ago a low exceptional rate of 25s. per ton was put into operation between Liverpool (and Birkenhead) and London for imported dead meat which was arriving in large quantities, and was so conveyed to the London market—not uncommonly in complete train loads. This rate, when first established, compared with a figure of 35s. or more for similar traffic of home production conveyed from stations in Cheshire which were actually on the direct line of the Liverpool-London route, and therefore travelling a considerably shorter distance.

The railway companies justified the lower rate from Liverpool on two counts ; firstly, the traffic was much more cheaply worked, as it could be conveyed in train loads at a time, and it was much more suitably packed for ready handling ; and, secondly, if they did not quote a considerably reduced rate for the traffic they would see nothing of it at all, as it would be brought to London by water direct, either by ocean-going steamers, which would make London their port instead of Liverpool, or else it would be transhipped at Liverpool to coastwise steamers, of which there were plenty always ready and only too willing to convey cargo of that kind. Twenty-five shillings per ton was therefore all that the traffic would bear ; but that was no reason why rates from other places, such, for instance, as Stockport, where the traffic was much more costly to the railway companies to convey to London, should have equally reduced rates. (It should be noted that considerable change has taken place in the details of these rates in the last thirty or forty years ; first, the rate of 25s., which

had so large an area of operation at the end of last century, was during the war period increased to 56s., and now stands at about 43s.; and, secondly, a good deal of revision has taken place in the comparative figures from the intermediate stations to London.)

It is interesting to note that in regard to this Liverpool-London import rate the division of Classes 2, 3, 4 and 5 is done away with, "import traffic" being taken as one. This is an important step in the direction of simplification, but it operates only in limited circumstances—though to a large traffic.

VIEW OF RATES ADVISORY COMMITTEE

In the report of the Rates Advisory Committee after their exhaustive inquiry in 1920, a very strong point is made about these low rates from the ports having been adopted as a defensive measure against coastwise competition; it is laid down that they really constitute the *fons et origo* of the exceptional rates system, and the report goes so far as to urge that they ought all, in the interest of traders and the rates system as a whole, to be swept away, for the coastwise water competition has to a large extent been killed during the war period directly as a result of these low exceptional rates, and if the coastwise vessel service is to be kept alive in future the low exceptional railway rates for competitive purposes must be put an end to. Whilst this report is doubtless quite accurate in its diagnosis of the position, we must hesitate before coming to a final conclusion that it would be of all round benefit to the consuming public if the low rates were all put an end to.

Let us try and follow now what has been the effect of these low Liverpool-London rates adopted in earlier days. It will easily be understood that Southampton and its railway company claimed to have rates to London on a similarly low and advantageous footing to that secured for Liverpool and Birkenhead; and a figure of 17s. 6d. per

ton came to be installed as the corresponding "port rate" for dead meat and provision sundries from Southampton. Then Hull and Newcastle-on-Tyne claimed special import rates to London, and these were in process of time established. Glasgow and the Scottish ports followed suit until from all the principal importing points in the kingdom exceptional rates for port traffic were agreed upon and put into operation. But the disintegrating process (disintegrating from the point of view of uniform tariff scales based upon distance) did not stop at traffic conveyed between the ports and London.

EXTENSION OF "EXCEPTIONS"

Birmingham and all that large group of producing and manufacturing places in the Midlands naturally felt that they had as much claim as Newcastle or as Liverpool to low rates for their traffic going to London, for they were traffic originating points, though they did not import; and the railway companies could make no stand against this claim, especially after the enactment of the Act of 1888, which included a clause prohibiting the railway companies from charging higher rates for imported traffic than for the same kind of traffic arising at home when "carried under the same or similar circumstances."

Over the meaning of this clause about traffic being carried "under the same or similar circumstances" a prolonged controversy arose: for, as a matter of fact, it could be contended without difficulty that imported traffic *never* was forwarded under precisely the same or similar circumstances to those of domestic traffic or traffic originating at home. As a matter of fact, however, at many ports which had any considerable volume of traffic coming in from abroad under low or reduced port rates, and where ordinary class or higher rates were on the books for traffic of the same description originating at the home station, the latter rates were in many cases cancelled or withdrawn, so that in these cases the apparent difference in charge between

home and foreign produce was eliminated. This was not done in all cases, however, and in 1895 the whole question was taken before the Railway Commissioners in a test case as affecting Southampton.

THE SOUTHAMPTON CASE

This was a case set on foot by the Mansion House Association of Traders against the London and South Western Railway, and alleged that the railway company were in fact making a real difference in the treatment of foreign traffic to the prejudice of the home trade, in that they were carrying traffic, such as imported bacon and hams, butter, cheese, fresh meat, hops, wool and hay to London at a lower rate from the docks at Southampton than they carried similar traffic when conveyed direct from Southampton town and other stations in the neighbourhood. The port rate on imported fresh meat was 17s. 6d. per ton to London, a distance of 76 miles, whilst the rate for meat from the town station was 26s. 3d. per ton: for hay the figures were 5s. per ton and 9s. 8d. respectively, and for hops 6s. for the imported goods against 20s. 10d. per ton for home-grown. From Botley, a neighbouring sending point in Hampshire (distance 76 miles), the fresh meat rate was 27s. 6d. per ton compared with the figure of 17s. 6d. for imported meat.

After a full hearing of the case the Commissioners found in favour of the railway company in regard to most of the traffics which came under review. They held that the difference of treatment was fully justified, having regard to the circumstances of the large traffic loads, both as regards the wagons and trains, in the case of the foreign traffic, as compared with the irregular lots of small quantities which constituted the home traffic, the latter often being badly packed or even not packed at all. In the case of fresh meat, hay and hops, however, where the quantities from abroad were much smaller, the court held that the differences between the home and foreign traffic was too great,

and they ordered that certain modifications of the rates should be made. The Commissioners' decision, however, it will be realized, was not very decisive.

A PROBLEM TO BE FACED

The reduced rates from all the principal importing towns in England and Scotland, which have been fixed at a level greatly below the class scale figures for similar traffic, create one of the outstanding facts in our rates system now in operation which will have to be dealt with on some general principle, whatever may be the revision which is given effect to, and must be dealt with in relation (a) to internal domestic rates generally, and (b) to the requirements and necessities of the competing steam services around our coasts.

When it is remembered that during the last thirty or forty years or more there has been a continuously developing practice of fixing rates for goods traffic by the goods manager, mainly upon comparison with other existing rates for traffic which have proved to be satisfactory from the point of view of developing increased traffic, it will easily be realized how the framework of reduced rates provided by the port traffic and traffic originating at large towns and producing centres affected by the port rates, has proved to be a lever for the continuous application of new and reduced exceptional rates in all directions.

THE NEW REGIME

But now under the new regime which has started with the 1921 Act, and with the emergence of the four great railway combinations, there is a very general feeling that a system of rates based on "exceptional" figures as regards 80 per cent or more of the traffic cannot be regarded as either satisfactory in itself or as being so likely to make for traffic development as one which might be founded upon more regular and logical arrangements.

This endeavour to bring the greater proportion of the

present exceptional rates and arrangements to an end by a wider application of scales and tariffs, has been the main aim which the new Rates Tribunal, and its predecessor, the Advisory Committee, set before themselves as important to be accomplished: and whilst the Advisory Committee, who reported to Parliament in 1921, were very clear that the abolition of the "exceptional" system was essential, more recent developments before the tribunal are tending to accentuate the difficulties in the way of giving effect to so great a change as would be necessary to restore a reasonable measure of order into the system of charging and a reduction of the number of exceptional rates existing

THE ADVISORY COMMITTEE AND EXCEPTIONAL RATES

It would seem well, therefore, to recall the paragraphs in the report of the Advisory Committee on which the 1921 Railways Act was based, which set out how the committee thought this subject of exceptional rates should be treated. They stated in the first instance—

The whole position of exceptional rates requires review. they have grown up in an accidental manner, without system or principle.

Then as to certain directions in which remedies may be applied, they said—

We are of opinion that the whole of the exceptional rates should be overhauled and systematized, and we think the general principles should be somewhat to the following effect—

(a) Where a class rate is at company's risk and an exceptional rate is at owner's risk, such percentage reduction (if any) as may be justified by the nature of the risk should be authorized.

(b) Where the exceptional rate is for large quantities, a percentage reduction (if any) according to the quantity may properly be adopted; but we think that, except in the case of light articles such as hay and straw, a lot of 2 tons is not entitled to any great consideration.

We advise that railway companies should be requested to submit a definite scheme for bringing the exceptional rates up to a standard based on the above principles, with such facts and illustrations as are necessary for elucidating it, as soon as the first stage in the general inquiry into rates is concluded.

The above extracts are from the first, or interim, report

of the Advisory Committee, made in July, 1920, recording their desire for the substitution of principles in place of the chaotic method of exceptional arrangements all round. They were being pressed for a report by a specific date—before the adjournment for vacation in 1920

When they made their final report at the end of the year the committee were much more specific in regard to the importance of an endeavour to bring to an end the exceptional rates system. After detailing the disastrous effect during the war of the quotation of exceptional rates in competition with sea conveyance upon the coastwise traffic around the shores, the committee state—

The foregoing shows that it is of first-rate importance that the exceptional railway rates which were brought into operation to meet competition by water should not be continued, or form the basis of new rates if carriage by canals and coasting vessels is to be preserved, which in our opinion is essential

And, further—

We find the greatest difficulty in distinguishing between exceptional rates which owe their origin to water competition and those which have arisen from other causes. The problem is not solved by dealing only with rates between port and port. The charges to places in the neighbourhood of sea ports are affected by competition as well as the ports themselves, and even as between ports there may be other grounds for granting exceptional rates than the existence of water competition

The section of the report dealing with exceptional rates concludes with the following expression of opinion—

We are convinced of the importance of preventing the continuation of such an enormous number of rates as now encumber the rate books; and particularly of putting an end to exceptional rates arising from water competition and other obsolete rates.

GENERAL INFLUENCE OF WATER COMPETITION

From what has been said earlier on in this chapter, it will have been noted how internal domestic rates are interconnected with port rates, and how difficult, if not impossible, it is to deal with one set of rates without revising all round, at any rate, under our competitive system. But as the water competition round our shores affects directly or indirectly so large a proportion of the total

traffic, may it not well be that it is the level to which all these principal rates have been brought down to by water competition that should furnish the datum line in relation to which all our rates should be adjusted, but upon some scale or tariff principle which would make due allowance for owner's versus company's risk and for varying quantities conveyed at one time.

It is interesting to recall the pronouncement in the report of the 1882 Parliamentary Committee on railway rates which said—

Three-fifths of the traffic of the United Kingdom has, according to the Report of 1872, its maximum fixed not by Act of Parliament but by the laws of nature and by the fact that Great Britain is an island

If the proportion of this traffic was 60 per cent 50 years ago, will it not probably be an even larger proportion to-day? In the United States a parallel state of affairs exists, and a great railway authority very tersely set out the position as to the effect of water competition in one of his addresses when he said—

Oceans and rivers, the waterways of the world, in their quiet way—as quiet and restless as the tides—confront every railroad corporation and say : “ In the regulation of your charges thus far shall you go and no farther.”

It is worthy of note that the American Transportation Act of 1920—legislation which corresponds in so many directions with our own 1921 Railways Act—makes definite provision for maintenance of adequate transport facilities and accommodation in full vigour to meet the nation's requirements, *both as regards water and rail*. Therein it differs from our own Act, which is confined to the railways.

CHAPTER VI

THE ADVANTAGE OF GEOGRAPHICAL POSITION

THE position and function of the science of transport in the general scheme of things has become so different in recent years, owing to the progress of applied science and the mechanical aids that have come to the assistance of the traffic operator, that it is well to try, by standing aloof and looking on, as it were, to appreciate the significance of these changes. Everything is moving; the world is dynamic, not static. Indeed, one great authority has said ' " Civilization *is* transport " ' Another has defined transport as the science of movement

RAILWAYS AND GEOGRAPHICAL POSITION

Let us, then, keep in mind this remarkable contrast with the time—a century ago—when the normal condition of our social or industrial world was static with occasional movement, such as a coach ride from London to York, which required four days, and which nobody would think of undertaking without first making a will with all the picturesque formality which those bygone days demanded; then let us picture afresh the effect of the impact of railway travelling and conveyance on the relative geographical positions of towns and industrial centres.

London produce for the North of England was shipped by coasting steamer to Whitby, conveyed to Pickering by the Whitby and Pickering railway, and thence distributed to various points in Yorkshire. When a railway was constructed from London to York, Whitby's position as a port (it was the seventh in importance in Great Britain in the beginning of last century) was seriously affected. It lost the advantage of its geographical position.

The granting of equal mileage rates under the early Acts

retained for each town served by the railway the advantage of its position where there was no water competition, and this continued until the granting of exceptional rates struck a blow at this principle.

THE TENDENCY TO NEUTRALIZE GEOGRAPHICAL DISADVANTAGE

The quotation of the same rate for sugar from Greenock to the Midlands as from London—twice the distance—was a precedent of far-reaching effect. But even up to the end of last century the cry of town after town or district after district was that in the development of transport or the fixation of rates they should not be robbed of the advantage of their geographical position, and it seemed a fair appeal. The consuming points of County Durham or Northumberland were considered as the proper markets for the Northern coalfields, just as the Midland collieries considered London as their special preserve, on the grounds that they might fairly claim to preserve the advantageous place in which they had been placed by Providence. But increasing transport facilities have changed all this ; and from the time when the rates for sugar from Greenock to the Midland towns were brought down to the same charge as from London there has been an increasing tendency for railway rates to be so arranged as to neutralize the disadvantage of a long distance haul. So we find the rates on fish from Thurso to London (roughly 800 miles) are the same in amount as those from Leith, only 400 miles, and this means that from any fishing port in Scotland, north of the Clyde and Forth, there is one and the same railway rate to London ; so that *qua* railway charge at least the figure has been deliberately fixed in such a way as to neutralize any geographical disadvantage. So with the three Humber ports, Goole, Grimsby and Hull : they are grouped for railway rates to the interior, and under such grouping the rate system is framed so as to give a ship master or importer the choice of ports on an equal footing—the port

nearer the towns of the interior is deliberately deprived of such geographical advantage as it was wont to have, and perhaps still considers it ought to have.

A PARALLEL FROM AMERICA

Let us interpose an illustration from America, where distances are much greater than here. One of the most striking cases is the arrangement of railway rates in U.S.A., under which for traffic going to the Pacific coast towns, New York and Boston are charged the same figures as Chicago and St. Louis. The whole of the Eastern States east of a line from Chicago to the Mississippi at St. Louis is grouped as a huge zone territory (roughly 1,000 miles across), from which there is one and the same rate to San Francisco, Seattle, or other Pacific coast town. The arrangement was deliberately made with a view to giving the Eastern towns a chance of competing on equal terms with Chicago, St. Louis and other middle west producing points for supplies to the far west, but the middle west places—1,000 miles nearer the consuming points—complained that they had been robbed of their geographical advantage. The Inter-State Commerce Commission, however, on appeal, sustained the position on behalf of Congress as being in the interest of the commonwealth at large

ELIMINATING DISADVANTAGES OF DISTANCE

Some wise person has said the science of transport is the science of eliminating distance, and the disadvantage of distance is becoming less and less almost exactly in proportion to the improvements in transport.

But the tendency of the time for places to lose their geographical advantage under the influence of improving transport is a world-wide tendency, and now that the world is "one in spirit," and we are becoming more and more one unit in these things, the possibility of any place maintaining a special advantage of its own is a diminishing factor.

In days gone by the transmission of news was a matter of time, depending entirely upon mechanical transport. Now, in these days of telegrams and telephones, time is no longer a factor and distance *is* annihilated. The advent of steam reduced the time taken by a parcel from Shanghai or Peking to London from four, five or six months to six or eight weeks, and the opening of the Trans-Siberian railway route brought this period down to a fortnight. The Atlantic "greyhounds" in recent years have brought the record time from New York to England down successively from a week to five or little more than four days, and now a Vickers aeroplane has flown across the Atlantic in 16 hours.

It is barely 20 years since that adventurous airman, Bleriot, first flew across the Channel and the whole world was thrilled with this new marvel, and now, just before writing this, I read in my newspaper the following significant paragraph *à propos* the great gale of the previous few days—

The storm was particularly severe in the Channel, where many vessels had to run for shelter. Passengers on the cross-Channel boats had a very rough crossing, but the 60 m.p.h. gale was defied by two Imperial Airways passenger expresses—one from Cologne and one from Paris. *They travelled with the gale, and arrived safely at Croydon.*

Another interesting illustration of distance being ruled out as a factor in rate fixing occurred some few years ago when the old North-Eastern Railway were vigorously cultivating development of traffic with Holland. A daily steam service between Hull and Rotterdam was started, jointly owned and worked by the North-Eastern Railway and the Netherland Steam Ship Company, and with a view to encourage parcels traffic by this route a scale of charges was put in force, available for the carriage of parcels from Northumberland, Durham and Yorkshire, i.e. the north-eastern area of England, to any place in Holland, and vice versa, at one charge, irrespective of the length of distance on either side, and this arrangement continued until the Great War suspended the service.

But by far the best illustration of how the distance element is being overcome as regards charging is in the realm of our Post Office operations. The penny postage—it has become 1½d. since the war, though most of us wish it might go back to the 1d. rate¹ for a letter up to 1 oz. at least—ignores distance in its scale of charge. It costs you or me the same to send a letter to New Zealand, 12,000 miles away, as it does to send the same missive only a quarter of a mile down the street, or even to our next door neighbour, if we use the postal service, as we probably should if we are dispatching a bundle of circulars. We never think in this connection of complaining that our own town or country is being robbed of the advantage of its geographical position. It still maintains some advantage in the matter of time occupied on the journey: the farther the distance away the longer does news take to travel by letter or newspaper. But it is very interesting to realize that when we come to the question of telegraphs, or telephones, or wireless, when the chief agent of movement is the electric current, even the time element in transmission disappears. It takes practically no longer to telegraph from Inverness than from Staines to London, and the charge in both cases would be the same, for distance does not count in the scale charge on which the price of a telegram is calculated anywhere within the British Isles.

The same principle of ignoring distance is adopted by the Post Office for the parcels they convey, although these parcels are only conveyed up to a limit of 11 lb.²

In America, where distances are great, there are some very interesting illustrations of what can be usefully done by the adoption of a "blanket" arrangement. We have already mentioned how the whole of the eastern States,

¹ The Postmaster-General has also said in Parliament (*Times* report, July 21, 1925) that the Government hope to see a return to penny post during their present term of office.

² On the Continent, i.e. Germany and, I think, in some other countries, the Post Office conveys parcels up to 112 lb. or more.—*Author.*

i.e. east of the Mississippi River and a line projected northwards from St. Louis to Chicago, are blanketed as one zone for rates to the Pacific, so that New York and the eastern towns may have equal chance in competing with the middle west towns as suppliers of the far west areas

A "BLANKET" MILK SCALE

A striking illustration may also be found in the efforts of the Erie and other railway companies to develop milk traffic to New York. In the latter part of last century these railroads decided to quote a rate for milk coming into New York at the same rate per gallon *for any distance*, providing also special facilities at the forwarding stations. Under this arrangement a large traffic was cultivated.

When milk came to be sent some 300 miles into New York it was held by the producers nearer to New York that it was an undue preference against the nearer-in towns or farms to convey for 300 miles at the same charge for the journey as for 30 miles and the matter was taken to the Inter-State Commerce Commission for adjudication. The total cost of conveyance for the longer distance was held to be appreciably greater than for shorter distances, and should be charged at a higher figure. A zone system was, therefore, ordered by the Commission, which should group everything under a 40-mile radius from Jersey City at one figure for all points, between 40 and 100 miles at a somewhat higher figure, and at increasingly higher figures for zone 100 to 190, and then all over 190 miles respectively ; the rates *within each zone* to be blanketed.

The decision of the Inter-State Commerce Commission in the milk case is worth studying. The zone scale adopted as the result of the discussion of this matter before the Commission is undoubtedly a compromise measure, but it gives effect to the two principles, namely, the elimination of distance over considerable areas, and the maintenance of a scale based on distance, but distinguishing only between zone and zone.

An interesting point, so far as we in this country are concerned, is that our milk rates, all by passenger train service, are on a similar zone scale basis, the British scale of charges for milk in bulk being as follows—

Distance Zone.	Zone Charge per Imperial Gall.	
	Pre-war Rates	Present-day Rates.
Up to 20 miles	$\frac{1}{2}$ d.	.78d
21 miles and up to 40 . .	$\frac{3}{4}$ d.	1 17d
41 miles and up to 100 . .	1d.	1.56d
101 miles and up to 150 . .	1 $\frac{1}{4}$ d.	1.95d
Above 150 miles	1 $\frac{1}{2}$ d.	2.34d.

Under this scale, it will be seen that for all distances over 150 miles there is but one charge. This is the same principle as we explained was adopted in all passenger train parcels traffic, whether charged on the ordinary scale, or on the owners' risk scale for so called "perishable" traffic, and it has much to commend it. Such a scale would encourage long distance traffic, whilst a mileage scale, which should charge 600 or 700 miles, say, at double the figure levied for 250 or 300 miles, would probably not only prevent development of new long distance traffic, but would put an end to such traffic as already exists. The case of fish traffic from Scotland or Ireland to London (referred to on page 54) may be quoted by way of illustration.

A very strong case could be made out for the blanketing of Scotland as one zone to London and to many other English stations, for traffic generally. Might not, for instance, a very considerable traffic be developed in potatoes from Scotland to London, Bristol, etc., in competition with Germany and the Continent, if the rates were less than they are? Or, again, a very heavy traffic in fruit has, in the past, been going from certain Scotch stations to the Continent, passing out of the country by way of Leith. Might not a 300-mile maximum rate encourage this traffic to come towards the London market?

ZONE SCALES

The principle of the zone scale now applied to milk and general parcels traffic seems admirably adapted to meet under present circumstances the two opposing tendencies of (1) the more and more pressing demand for equal treatment of all traffic senders, based on a distance scale, under which each place would have guaranteed to it the advantage of the geographical position in which Providence has placed it, and (2) the gradually diminishing disadvantage of distance under modern transport developments. By the application of a scale under which groups of stations within radial zones are "blanketed" and charged at one figure, whilst each group or zone is varied according to its distance from the sending or receiving point, the subtleties of distinction and gradation at every separate mile are done away with, but the broader variation according to mileage groups is preserved; and in the two cases named (milk and general parcels),¹ when 150 and 300 miles are reached respectively on the scale, the charge for these distances is recorded as the maximum figure chargeable. It is worthy of serious consideration whether such a zone scale with maximum charge could not with advantage be adopted for passengers and for merchandise generally.

THE WORLD BECOMING ONE MARKET

The great benefit of this loss of advantage in geographical situation accrues to the consumer in this way: he can buy the commodity he is in search of from practically any part of the world. Is it not an enormous public facility for the purchaser of a machine, say a motor-car or a complex tool of any kind, to be able to select his goods from any country, be it Italy, Japan, America or Great Britain, ensuring him the opportunity of obtaining the best in the world's market?

¹ It is an interesting fact that ordinary parcels traffic is the most conspicuous illustration of a growing traffic to-day (1925-6), when there is a general tendency towards shrinkage, and as regards milk traffic it has increased enormously of recent years.—*Author*.

The world thus becomes one market for all alike, as it has already done in many commodities, such as butter, grain, iron ore, etc. As regards butter, a purchaser can make his choice from New Zealand, South Africa, America, or Denmark, according to his idea of taste and prices, and these goods will compete together in many of the consuming markets of the world. In the pre-war days, butter was brought from Tomsk (Siberia) 2,000 miles by train to the port in the Baltic, transhipped by human labour to a steamer, conveyed down the Baltic, around the shores of Denmark, and across the North Sea to Newcastle-on-Tyne, then discharged at Newcastle quayside, carted across Newcastle to the railway station, then transferred again by human labour from cart to the railway wagon (where it required careful packing) ; the wagon of butter was then conveyed by special train across Yorkshire, passing the home farmers' premises *en route* to Manchester, where it could not only compete with, but actually undersell, the Yorkshire farmers' butter in the market ; and Danish butter does the same thing to-day, though travelling from a shorter distance.

This is what modern transport arrangements are doing in the way of eliminating the drawbacks of distance. But the fact must remain that disadvantage in the case of more distant places cannot be altogether eradicated in regard to material commodities as it has been in the case of telegraphic and wireless facilities. The adoption of a zone scale in British rates and charges would not only give effect to the principles we have referred to—equal treatment for all, recognition of the factor of distance, and of the increasing tendency to circumvent the disadvantage of distance—it would lead also to enormous simplification, itself a great asset.

CHAPTER VII

THE TERMINALS CONTROVERSY

EVERY railway rate charged for goods traffic is made up in theory of charges, (1) for the use of station accommodation and for services rendered at the station, and (2) for the actual conveyance of the goods from station to station, as the train proceeds on its journey.

TERMINALS AND CONVEYANCE

These two sections, into which railway rates may be divided, are technically known in the railway world as charges for terminals and charges for conveyance

In the early days, as has already been pointed out, the railway companies were allowed to charge such figures as their goods manager or other agent thought fit, so long as they did not exceed the maximum figures prescribed by the Acts of Parliament. As the railways extended and the large stations at important places grew and developed, the railway companies soon found that the handling of goods at the forwarding and receiving points was a costly service, and the contention arose on the part of the railway companies that the figures sanctioned by Parliament for railway conveyance did not cover the terminal work, but were intended strictly for conveyance on the railway. For many years this controversy about terminals raged between the railway companies and their customers, until it was eventually settled by legislation in 1888, when the Railway and Canal Act of that year was passed. This Act required all railway companies to submit a schedule of the rates and charges they proposed to make for all classes of goods that they carried, and such schedule was to include a statement of the nature and amounts of all terminal charges proposed to be authorized in respect of each class of traffic, so when

the rates "confirmation orders" for the different carrying companies were before Parliament in 1891 they contained provision for terminals being levied by the companies under each class of the classification, such terminals being defined under the headings of station and service terminals, the station terminal being in respect of the station accommodation provided at each end of the journey, and the service terminal being defined to include loading, unloading, covering or sheeting and uncovering. The exact figures specified for each of the eight classes in the classification are set out in the table given below. The figures given are, it must be borne in mind, maximum figures, not figures actually applied, but the recognition of them as a statutory provision settled once and for all the terminal controversy, that is to say, so far as the railway companies' power to charge was concerned—

CLASS	Station Terminals at each end	SERVICE TERMINALS.			
		Loading.	Unloading	Covering	Uncovering
	Per ton s. d.	Per ton. s. d.	Per ton s. d.	Per ton. d.	Per ton d.
A	0 3				
B	0 6				
C	1 0	0 3	0 3	1 00	1 00
1	1 6	0 5	0 5	1 50	1 50
2	1 6	0 8	0 8	2 00	2 00
3	1 6	1 0	1 0	2 00	2 00
4	1 6	1 4	1 4	3 00	3 00
5	1 6	1 8	1 8	4 00	4 00

THE HISTORIC "PIANO CASE"

To show the importance of the question to a traffic sender we may quote the celebrated piano case, which was referred to many times in the negotiations which led up to the 1888 Act, where the sender of a piano by railway over a short distance was confronted with a bill at the rate of 14s. 2d. per ton for carriage for a distance of $5\frac{1}{2}$ miles,

the maximum provided by Act of Parliament for conveyance being 2s. 2d. (i.e. 6 miles at 4'3d per ton per mile). The actual charge was made up as follows—

	s	d.
For conveyance	2	2
„ terminals, 2/6 each end	5	0
„ cartage in collecting and delivering piano, 3/6 each end	7	0
	<hr/>	
	14	2

Collection and delivery is a service which the railway company is under no obligation to perform, and is fully entitled to charge for when it does perform the service. There has been no question about that. But prior to 1892 the station and service terminal work was held by traders to be part of the general function of railway conveyance in respect of which parliamentary charges were sanctioned.

COST OF TERMINAL FACILITIES

When one reflects, however, upon the very heavy cost of terminal stations, whether passenger or goods, one cannot deny the justification which exists for some specific charge being made for the use of terminal accommodation. In the early days, when traffic was small in volume, large stations with miles and miles of sidings for reception and marshall-ing accommodation were unknown ; but every year with the greater concentration of traffic, especially in the large town centres, the cost of handling traffic at large stations has so increased that it has been forced upon the railway companies' attention. The whole question has had much consideration in America as well as in England. As far back as 1891, President Roberts, of the Pennsylvania Railway Company, made the announcement that it was necessary to carry west bound traffic leaving Philadelphia a minimum distance of 70 miles in order to cover the cost of terminal working at Philadelphia alone.¹ A large company like the Erie Company in New York had no less than 71

¹ Acworth : *The Railways and the Traders*, page 315.

points of delivery—practically 71 stations in New York and vicinity alone. The word "terminal" has been adopted in America as the name for a station. Anyone speaking of the Philadelphia and Reading station would allude to it as the "Reading terminal," so, when the Pennsylvania railroad pushed northwards by tunnel under the Hudson River into New York, it built there its new "terminal," which is probably the largest passenger station in the world, rivalling, if not surpassing, the striking terminal station built by the German States Railway at Leipzig, the largest station of Europe.

DEFINITION OF TERMINALS

We have given the figures that were prescribed by Parliament in 1891 as the maximum terminals which the railway companies might charge for varying descriptions of traffic. We had better now give the definition of terminals which was laid down in the same Acts of Parliament. The maximum rate for conveyance was specified to be the maximum rate which the company might charge—

For the conveyance of merchandise by merchandise train, including the provision of locomotive power and trucks by the company and every other expense incidental to such conveyance not otherwise herein provided for.

In another paragraph—

The maximum *station terminal* is the maximum charge which the company may make to a trader for the use of the accommodation provided and for the duties undertaken by the company at the terminal station for or in dealing with merchandise before or after conveyance

And in another paragraph—

The maximum *service terminals* are the maximum charges the company may make to the trader for the following services when rendered to the trader, i.e. loading, unloading, covering, and uncovering merchandise, such charges to include the provision by the company of labour, machinery, plant, and stores.

It will have been noted that where terminal charges fixed by Parliament are here referred to they are for *maximum* charges, or, rather, they are the maximum limit of charge

laid down by Parliament beyond which the railway company may not charge.

We must now refer a little further to the historical aspect of this question. No thought of terminal charges was apparently in the minds of the early railway promoters, who, of course, had no idea of the extent of future passenger and goods terminal accommodation such as we know it to-day. Most of the traffic was either heavy traffic—coal, wood, stone, manure, sand, etc., making little use of station accommodation, and loaded or unloaded by the senders and receivers, or it was of small parcels, easily dealt with by a porter or the train guard, in the same way that country carriers receive and deliver small parcels for persons along the route of their journey in out-of-the-way districts to-day. The large goods stations, such as we have at Somerstown or Paddington or Birmingham to-day, with all their careful organization, could not have been foreseen.

GROWTH IN COST OF TERMINALS

But the circumstances were quite different after the middle of the century, as the traffic grew so remarkably. By 1865 and 1870 there was a great deal of traffic, in respect of which the railway companies had perforce to render heavy services, and also to provide costly station accommodation; and the question of obtaining additional and adequate charges for the terminal work became a crucial one, often leading to serious dispute between railway and trader. To such an extent was this the case that the matter came before Parliament and, when the 1873 Regulation of Railways Act was passed—the Act under which the Railway Commissioners were first appointed, provision was made that the functions of the Commissioners, besides hearing general complaints from traders, were to include specifically (1) the interpretation of the law enjoining no undue preference, and (2) to decide any question as to the amount which a railway might charge for terminal accommodation or services. The prolonged controversy which

continued to range round this question of terminals was only settled by the passing of the various railway Acts of 1891 (one for each railway company), which not only decided that a railway company might charge a reasonable sum for the use of terminal accommodation and also in respect of services rendered, but it also went so far as to fix what charge might be made for such terminal facilities in respect of every description of goods carried by railways. These are the figures which are set out for each class of goods on page 63.

These maximum terminal charges have remained in force from 1893, when they took effect, until they, with all other maximum figures prescribed by Parliament, were swept away as it became necessary during the war to increase railway charges, irrespective even of the legal enactments limiting them. But whilst the principle of parliamentary maximum charges has gone, the principle of a charge being made for the terminal services and accommodation still remains.

TERMINAL ACCOMMODATION

Bearing in mind now the parliamentary definitions of station terminals and service terminals, let us give some consideration to the facts which these terms represent, for in view of the heavy cost in which the railway companies are involved in the provision of terminal accommodation, it is important to understand precisely in what such accommodation consists.

Dealing first with station accommodation, nearly every goods station has its accommodation divided between (1) the goods shed or station building, (2) the station yard, and (3) the offices for the supervision or controlling staff.

The Goods Shed or Station Building. This is a covered-in building, generally substantially constructed in brick or stone, in which all ordinary traffic of a miscellaneous character is dealt with and loaded into wagon. It should be equipped with a loading bench (or "bank" in London

terminology), whose floor is practically on a level with the rully or cart floor and with the floors of the railway wagons, and railway line accommodation, providing berths sufficient for conveniently " setting " goods wagons for the receipt of one day's dispatch of traffic. Whilst this represents an ideal arrangement and should always be aimed at, many stations have to be content with much below this, and have to have their sidings " drawn " and reset with empties once or twice a day: but this is not good working. The shed should be well equipped with barrows and with cranes for adequate and expeditious handling of traffic. It should also be well equipped with weighing machines on the benches; and with power-worked capstans to move wagons as required.

The Station Yard consists mainly of an area with sidings and roadway access. The sidings consist of reception lines, into which incoming trains are placed until the station is ready to receive the separate wagons; dispatch sidings into which loaded wagons can be placed to be made up into out-going trains; and traffic sidings where wagons can be loaded or unloaded with traffic which does not need covered accommodation. This includes all the heavier classes of traffic, such as minerals, timber, grain, ironware, cattle feeding cake, bricks, roadstone, etc. All these sidings must be arranged with convenient roadway access for rullies and carts. For coal, separate accommodation is necessary in a separate part of the yard. There must be convenient crane accommodation, a 3-ton or a 5-ton crane as may be required in a selected part of the yard, and a cart weighing machine should be fixed at the roadway entrance.

At many large towns a specially arranged section of the station is equipped for fruit and vegetables and potatoes, usually, when so arranged, well equipped with merchants' offices and some little storage accommodation. Every station, too, has its accommodation for dealing with live stock traffic, which requires a special loading dock with

cattle pens or movable hurdles and equipment for white-washing and cleansing of trucks

TERMINAL SERVICES

These include all that multiplicity of service rendered at a goods station in receiving and accepting goods for dispatch, invoicing it, loading it, sheeting it, and generally preparing it for safe and ready dispatch. It will be understood how, with a heavy article like a piano, or a 5 or 6 cwt. case of bacon, no small labour cost is involved in "handling" the consignment before the package is securely settled in the wagon that is to convey it to or towards its destination. These services are carried out by a regular army of functionaries, described and known in America by the expressive title of "freight handlers." In Great Britain they consist chiefly of checkers, goods porters or barrowmen, loaders or stowers, and cranemen, capstanmen, etc.

THE "PIDCOCK" CASE

Very commonly in the past, particularly in the case of exceptional rates, the actual rate in operation is one having no reference to the parliamentary maximum figure, but fixed very much below that figure and fixed more or less on a rule of thumb basis as a result of competition. In such cases there has arisen much controversy between the traders and the railway companies to know how much a specific rate includes for the terminal accommodation and services. The provisions of the legal enactments¹ require that whenever any trader desired to have an allocation made as between the charge for the "terminals" and charge for the "conveyance" included in the rate, he could have it upon written application to the railway company. It has been around the figures supplied by the railway company in such circumstances that contentions have arisen, it being open to the railway company to contend, as it often did,

¹ Railway and Canal Traffic Act, 1888, Section 33, Sub-section 3

that as the actual rate charged was so much below the mere conveyance charge as specified by Parliament *there was nothing included* in the rate specifically for the terminal. Several cases were fought over this point before the Railway and Canal Traffic Commission, and one of the most noteworthy of these was the "Pidcock" case (*Pidcock & Co. v. M. S. & L. Co.*, 1894). Reference is made to this case here because the decision pronounced by the Commission upon it will very likely be quoted as forming a useful precedent before the Rates Tribunal in future cases.

Pidcock & Co. were maltsters, with a siding adjacent to the railway station at Retford, and they contended that as regards terminal accommodation and services the railway station was not used and they required no services from the railway company, as they performed their own loading and unloading. It transpired, however, that the railway company did perform the service of sheeting the traffic, and the court ruled that there was no case for any rebate being made to the trader for services, but as regards the station terminal the Commissioner's decision was in favour of Messrs. Pidcock, and approval was given to a method of determining the amount of rebate to be made, by fixing it *at the same proportion* to the total rate on the traffic as would obtain supposing the rate had been fixed at the sum of the authorized maximum figures for conveyance and terminals.

The application of this ruling will probably be much more clearly understood if we illustrate by precise figures. There is, let us say, a special rate of 5s. per cwt. in operation for the carriage of fish from a Scotch port to London—400 miles. The authorized maximum is 5s. 7½d. for conveyance and 3d. for terminals, ¾d. at each end for station terminal and ¾d. each for loading and unloading. If the station accommodation and services are assumed to have been provided by the trader, and not by the railway company, then the Pidcock principle would mean that the trader was entitled to a figure whose proportion to the 5s. was the

same as that borne by 3d. to the total maxima, 5s. 10½d. The proportion would be 70·5d. : 60d. :: 3d. : $x - x$ standing for the amount of rebate to be awarded to claimant ; x in this case would equal 2·55d. per cwt. or 4s. 3d. a ton.

The railway companies have argued, with a good deal of reason : " We are allowed to charge up to 5s. 7½d. per cwt., irrespective of any charge for terminal services or accommodation, and therefore nothing has been included in the rate of 5s. for those services. Even, therefore, if the trader does his own loading and unloading at a siding and does not use the railway company's station facilities, that is no affair of ours, it is the trader's own lookout. The company are entitled to charge 5s. 7½d. and we have only asked the trader for 5s. We have provided our station and are quite ready to let the trader use it and to perform the terminal services for him if he so desires."

THE "PIDCOCK" PRINCIPLE ADOPTED

This decision seems to provide a very simple and not unreasonable method of settling the exact method of making the allocation when such allocation is required. Parliament was persuaded to think so too in 1921, for in the Railways Act of that year this method finds expression as the principle to be adopted in the case of such allocations.

The exact provision in the Statute reads thus—

When a railway company in granting an exceptional rate has not distinguished in the quotation for the rate or in the rate book the amounts included therein for such several services as aforesaid,¹ the rate, in the case of a station to station rate, shall be deemed to be composed of conveyance rate and terminal charges in proportion to the amounts included in the corresponding standard rate for the same service and accommodation in respect of similar goods between the same station.

EFFECT OF TERMINAL CHARGE ON RATES

It will be noted that in the supposititious fish rate just taken, the terminal figure seems a very small item, in great contrast to the 12s. included in the 14s. 2d. per ton figure,

¹ I e. (a) conveyance ; (b) station terminals , (c) service terminals.

dealt with on page 64 respecting the piano. It is important to explain this difference. In the first place, the one case is a long distance rate; the other, a short distance one. The terminal charge, i.e. the charge for the use of the station and for services provided thereat is the same, whatever be the distance the traffic is conveyed. It is, therefore, always a large factor proportionately in the case of a short distance rate. Let us assume that 4.3d. per mile per ton of furniture is the same mileage conveyance figure for any distance and that the terminal charges are 3s. 6d. for station and service at each end and 2s. 6d. at each end for cartage. Then at varying distances the total rate would be—

		Per ton.			Per ton per mile	
		£	s.	d.	s	d.
For	6 miles	.	.	0 14 2	2	4.33
„	30 miles	.	.	1 2 9	0	9.10
„	100 miles	.	.	2 7 10	0	5.74
„	400 miles	.	.	7 15 4	0	4.66

The figure of 12s., representing charges at the terminals, is equally the same amount included in 14s. 2d. at 6 miles, or in the £7 15s. 4d. per ton, the charge at 400 miles. In practice, as has been fully explained, the conveyance charge is arranged at a diminishing figure as distance increases, but in the illustration the 4.3d. per ton-mile figure is taken as a constant, so as to bring out the effect on the total rate per ton per mile, which the inclusion of a terminal charge makes.

The diagram on the next page should be of assistance as indicating the terminal accommodation at a goods station in relation to conveyance, the latter service being represented by the two parallel straight lines with the terminal accommodation at either end (stations *A* and *B*).

In some countries—Germany is a notable case—all the tariff scales of rates for ordinary traffic are made up specifically by the inclusion of a stated figure as the terminal addition in each class of traffic. It would seem as though the requirement of the 1921 Act of Parliament will result

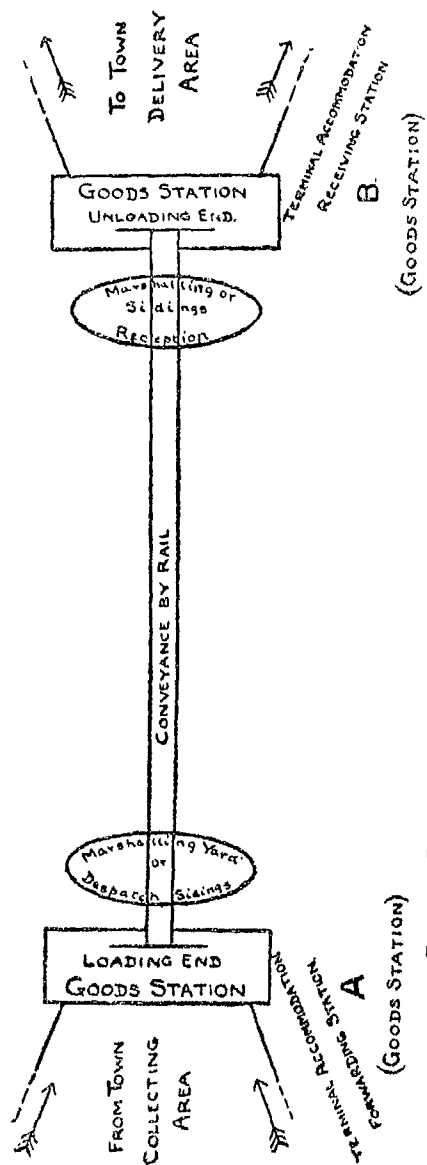


DIAGRAM ILLUSTRATING TERMINAL ACCOMMODATION AT GOODS STATION

in a similar arrangement being adopted in our future rates system, following " the appointed day," for the Act requires that in the new rates system which is being evolved under the Rates Tribunal, every rate shall be submitted to the Tribunal for approval, the charges for conveyance and those made for terminals being separately shown, and when so submitted and approved they will become the standard charges (until again altered by the Tribunal). The same subdivision as between the charge for conveyance and terminals is to be given effect to in regard to any exceptional rates which the Rates Tribunal may in future sanction.

CHAPTER VIII

COST OF SERVICE AS A FACTOR IN RATE-MAKING

IN fixing charges or prices in any ordinary commercial or industrial business, the main principle which is taken into account by the manager is that of what the provision of the commodities or services has cost or will cost him. Then, after calculating his costs, the trader, having made due allowance for his own personal remuneration and for any interest on capital, fixes his prices or rate of charge to his customers accordingly. This may be considered in trading the normal arrangement under which the price of a commodity is fixed, and one asks oneself, naturally, cannot the railway company fix its conveyance rates, whether for goods or for passenger service, in direct relation to the cost which it has to incur to provide the necessary accommodation and service? The cost of service must necessarily loom large in the manager's eyes, because the outgoing expenditure has to be met by the receipts, and not only so, but the receipts—revenue receipts we call them—must be of such a figure as will not only cover "out of pocket" and overhead expenses, but will yield a surplus or margin to cover interest charges.

NORMAL COST ITEMS

A normal manufacturing business or industrial concern will find its annual expenditure spread over the following items, viz.—

1. Rent.
2. Cost of management and overhead charges.
3. Maintenance of building, plant and machinery, (a) wages cost ; (b) cost of materials.
4. Direct costs of production or purchase of goods.
5. Insurance.
6. Depreciation.
7. Interest charges.

HEADS OF RAILWAY EXPENDITURE

All the above items have their counterpart in any railway company's accounts, and the items of expenditure which have to be covered by the traffic and general annual receipts upon a railway are as follows—

1. Maintenance and renewal of the permanent way and works generally.
2. The maintenance and renewal of rolling stock, including locomotives, carriages and wagons.
3. The provision of locomotive power
4. Traffic expenses, i.e. all expenses (other than locomotive cost) incurred in effecting transportation.
5. General charges, including law and parliamentary, Government duty, rates and taxes, etc.
6. Depreciation and betterment charges.

All these items of expenditure are very carefully and elaborately provided for in every railway company's published accounts, these accounts being standardized and made statutory under the 1911 Act of Parliament applying to railways (Railway Companies' Accounts and Returns Act, 1911).

INTEREST CHARGES

It is a matter for discussion whether interest charges should be considered as an item of cost or otherwise, but however they may be treated as a matter of account there should be sufficient surplus, after the expenditure under the heads set out above has been incurred, to provide some return as interest on capital. All capital expenditure and receipts, as well as all interest charges, are set out in great detail in the published accounts, the standard form being prescribed under the 1911 Act of Parliament above referred to.

At what rate this figure of return on capital may be most suitably fixed is a matter around which there is much discussion in railway circles to-day. But the 1921 Act of

Parliament has gone so far as to provide statutory authority for maintaining an interest return to capital on a standard basis, that standard being fixed at the figure shown in the 1913 yearly accounts, with certain adjustments to meet subsequent capital expenditure.

CHARGES CANNOT BE FIXED SOLELY ON COST BASIS

There are advocates who claim that the railway company should fix all its charges for the various commodities that it carries directly according to the cost incurred in the manipulation of such traffic; but very little consideration is sufficient to show the impracticability of any proposal of this kind.

There are in railway accounts a very large number of items which come under the heading of what the economists now term "joint costs." This makes the problem of allocating specific costs to specific commodities conveyed a very difficult one. Take, for instance, the miscellaneous goods train which conveys traffic of all kinds, including one wagon of copper ore, another wagon of furniture, another of potatoes, and so on through 50 or more wagons, how is the engine cost to be distributed as between copper ore and the furniture or potatoes? How are the signalmen's wages at the signal box the train passes when on its journey to be allocated to the different commodities using the line? How, indeed, are the signalmen's wages going to be divided as between goods and passenger trains that pass his signal box, or how is the cost of upkeep of permanent way going to be divided as between train and train, say, as between goods and passenger train or even between one goods train and another? It is considerations of this kind that have, up till now, stood in the way of any allocation of expenditure and wages incurred being divided evenly amongst goods and passenger, much less being distributed fairly over different consignments. Proper and adequate train.

be too earnestly insisted

upon. Of the relative cost of one description of traffic compared with another, whether it be a geographical comparison in distance or a commodity comparison, it is highly important that a goods manager or other officer should have as much information as can be accurately tabulated.

The question of cost of service has come more and more to the front in our railway legislation in recent years. The Act of 1894 was passed to throw upon railway companies the onus of proof that any increase of railway charge was a reasonable one, and the interpretation of this provision in the Act, which was placed upon it by the Railway Commissioners on an early day after its passage, was that the railways *must prove an increase in the cost of carrying their traffic*, and that the justification of increased cost must apply to the particular traffic in question rather than to railway working as a whole. This ruling of the Commissioners was given in the case of the Charlaw and Sacriston Collieries against the North-Eastern Railway, heard in 1897.

The Railway and Canal Traffic Act of 1913 was passed by the legislature deliberately to redeem a promise made by the Government in the autumn of 1911, following the great railway strike of August of that year, that they would bring in legislation to enable the companies to recoup by increased rates and charges the increased cost in the labour bill, due to the improvement effected in the wages and conditions of the working staff, and under this Act an increase of 4 per cent upon all exceptional rates was levied and took effect the same year.

From these two legislative enactments it would appear as though the legislature were coming more and more to regard the question of cost as the basis for railway charges, at any rate, when any increase of charges is involved ; and it may, therefore, be regarded as not unreasonable that, perhaps as a corollary to this point of view, the public who use the railways are expressing more and more pronouncedly their view as to a converse set of arrangements, namely,

that when the railway companies' accounts show that a surplus has been secured in their receipts, they, the trading public, should reap some advantage in a reduction of charges. This view found much expression when the Act of 1921 was under consideration, and is found reflected in the provisions of the Act.

SUMMARY AS TO COST OF SERVICE

If we may now summarize what has been said on the question of cost of service in this chapter, our conclusion would be that, whilst it is highly important that as much accurate information as possible should be at hand for use by the goods manager of a railway company to guide him in determining the direction in which conveyance charges should be fixed, it is impracticable to apply costs figures for any detailed fixation of rates to particular items of traffic or between particular pairs of stations. But in a more general way the element of cost *must* come into consideration, if it is not always in the background in regard both to the class of goods and the length of distance that any consignment is conveyed. In determining the classification of goods, for instance, when taking into account the factors of size or weight of goods and distance of journey, it is really the question of cost that is involved—these are the factors which affect the cost of loading and conveyance.

Or, again, the heavy cost of terminal service and facilities, and the large proportion of the charge which, as compared with conveyance, the terminal expense so often absorbs, is another factor which looms large when questions of cost are analysed. This question has been dealt with somewhat fully in Chapter VII.

In Great Britain, unfortunately, we have very little material on which to compile any basis of cost in relation to any particular traffic rates, some railway authorities even going to the extent of advocating that any figures beyond the mere "out-of-pocket" costs of working are valueless, because they are apt to be misleading. If,

however, any conclusion as to the adequacy of a rate charged or proposed were to be adopted without a knowledge of the overhead and fixed costs as well as the out-of-pocket figures, the danger of being misled would undoubtedly be very much greater still.

ASCERTAINMENT OF COST

The way in which the cost of working any particular traffic would be tested is usually by calculating receipts and expenditure on specific trains or traffics, the cost being worked out per ton mile or per train mile, the latter figure being adopted when the traffic is of such a nature as can be worked in train loads. These costs on specific traffics need, of course, to be compared with average standard figures for the traffic as a whole—whether passenger or goods.

Certain costs, such as the locomotive running cost and the trainmen's wages, can be obtained by a direct process, and apportioned over the miles and the train or the ton, as the case may be. To these must be added the overhead costs or "on costs" by the use of average figures obtained statistically. Such figures would include (1) cost of wear and tear of rails; (2) upkeep of stations and other buildings; (3) superintendence and management; (4) cost of wagons; (5) repairs to and upkeep of locomotive; (6) general charges: or such of these costs as may not have been included in any "out of pocket" statement of costs directly ascertained.

All these services or items must be covered in the rates and charges before a railway can properly yield any return upon its invested capital, and it is essential therefore that the charges made upon the traffic it carries should be sufficient to cover the whole of the costs of working.

It may occasionally be justifiable to adopt a special rate under exceptional circumstances fixed at a level below the full cost of working, but it is manifest that if that was done as an all round practice or on any regular system there

would sooner or later be no return on capital account. Herein is a real danger, which must be inherent in any system based on exceptional rates, or on such an indefinable system or idea as that of "what a traffic will bear." Whereas with us in Great Britain such a large proportion of rates are "exceptional" it would seem more than ever essential to know what relation the figures bear to the full cost of working.

STATEMENTS QUOTED FROM U.S.A. RAILWAYS

The American railways have for many years been in the habit of separating their costs as between goods and passenger traffic, and as an example of how these figures are tabulated and made use of for statistical purposes, three tables are appended to this chapter as illustrative of these figures.

The first is a table published by the Pennsylvania Railroad in their report of 1917, which shows respectively the receipts and expenditure of working their passenger and goods traffic. It forms a statistical comparison for the ten years from 1908 to 1917 inclusive.

The second table is a similar comparison of ten years from a more recent report—one of the railway companies in the Eastern States for 1925. It shows what very different financial results are obtained on that railway from the working of goods and passenger traffic respectively.

The third table shows certain figures of cost taken over the American railways as a whole, worked out to a unit per train mile in respect of goods and passenger traffic respectively: these figures are presented in a report of the Inter-State Commerce Commission as to railway statistical results in 1923 and 1924.

It is necessary to point out in regard to these tables that the value of the results they show depends very largely upon the method adopted in apportioning joint costs; and that much discussion is still going on in America as to

whether the methods up to now adopted are of the best, and whether they can be improved. On this point there is some diversity of opinion. The whole question is one for research by accountants and statisticians, offering scope for a new lead and the establishment of a new precedent.

The importance, however, of having satisfactory and reliable standard figures of cost as an assistance in getting rates and charges on to a right datum level on which to provide a standard revenue becomes greatly emphasized in view of the two recent railway Acts, the American Transportation Act of 1920 and the British Railways Act, 1921, in both of which the principle of a standard revenue is established.

PENNSYLVANIA RAILROAD
FROM PRINTED REPORT FOR YEAR ENDING 30TH JUNE, 1917

YEAR	FREIGHT TRAFFIC.			PASSENGER TRAFFIC.		
	Revenue per Ton per Mile.	Expendi- ture per Ton per Mile.	¹ Per- centage	Revenue per Passenger per Mile.	Expendi- ture per Passenger per Mile.	¹ Per- centage.
	Cents.	Cents.		Cents.	Cents.	
1908	0.569	0.408	71.7	1.975	1.561	79.0
1909	0.580	0.380	65.5	1.964	1.701	86.6
1910	0.583	0.412	70.6	1.959	1.687	86.1
1911	0.587	0.407	69.3	1.980	1.805	90.1
1912	0.583	0.410	70.3	1.962	1.829	93.2
1913	0.583	0.435	74.6	1.951	1.814	93.0
1914	0.589	0.434	73.7	1.951	1.865	95.6
1915	0.610	0.426	70.8	2.057	1.822	88.5
1916	0.603	0.436	72.3	2.074	1.665	80.2
1917	0.631	0.512	81.1	2.101	1.703	81.05

In initiating and establishing a new system of figures of cost, which it seems essential will have to be provided in the future, the factors to be borne in mind as necessitating cost figures, are—

(a) Relative revenue-yielding capacity of passenger and goods traffics.

¹ These percentages columns have been added by me. They represent the "operating ratios" of the two traffics.—*Author.*

PASSENGER AND FREIGHT REVENUE STATISTICS, 1916-1925
B. R. AND P. R. CO

YEAR.	PASSENGER.				FREIGHT			
	Per Passenger		Per Passenger per Mile		Per Ton		Per Ton per Mile	
	Receipts	Cost.	Loss	Receipts	Cost.	Loss.	Receipts	Profit
1916	Cents. 61.16	Cents 68.03	Cents. 6.87	Cents 2.217	Cents. 2.466	Cents. .249	Cents 74.66	Cents 20.28
1917	64.10	76.53	12.43	2.300	2.746	.446	82.90	17.75
1918	74.38	121.01	46.63	2.598	4.227	1.629	100.32	5.98
1919	81.04	135.46	54.42	2.752	4.600	1.848	106.54	Loss.
1920	86.00	119.59	33.59	2.949	4.101	1.152	127.26	6.08
1921	93.79	132.44	38.65	3.341	4.717	1.376	159.41	Profit.
1922	96.96	161.05	64.09	3.279	5.447	2.168	147.98	3.72
1923	101.74	152.66	50.92	3.211	4.818	1.607	137.27	7.71
1924	101.95	143.82	41.87	3.138	4.426	1.288	136.84	1.052
1925	105.12	168.47	63.35	3.073	4.924	1.851	138.92	905
								870
								12.64
								24.41
								28.49
								918
								903
								771
								748
								1.001
								.912
								.790
								.754
								.718
								.030
								Profit.
								.023
								.051
								.053
								.080
								.164
								.185

¹ Administration by Government during War, 1st January, 1918, until 28th February, 1920.

- (b) Comparative cost of long and short distance traffics.
 (c) Costs of terminal accommodation and terminal services.
 (d) Relative cost of varying traffics when worked as wagon loads or train loads or separate packages.

RAILWAYS OF U.S.A.

CLASS I.—STEAM RAILROADS

Selected Cost Items separated to show Passenger and Goods Costs

COSTS PER TRAIN MILE AND OPERATING RATIOS

Average tons per train = 713; therefore \div by 713 = per ton mile

	Passenger Service.	Goods Service.
Revenue Receipts per Train Mile, 1923 .	\$2.563	\$7.187
Expenditure per Train Mile—		
Locomotive Repairs	\$286	\$489
Percentage on Gross Receipts . .	11.16%	6.80%
Train Enginemen	\$128	\$262
Percentage on Gross Receipts . .	5.00%	3.65%
Fuel for Train Locomotives . . .	\$224	\$506
Percentage on Gross Receipts . .	8.73%	7.04%
Engine-house Expenses	\$063	\$095
Percentage on Gross Receipts . .	2.46%	1.32%
Trainmen	\$140	\$298
Percentage on Gross Receipts . .	5.46%	4.15%
Other Loco. and Train Supplies . .	\$095	\$099
Percentage on Gross Receipts . .	3.71%	1.38%
Total Selected Accounts	\$936	\$1,749
Percentage on Gross Receipts . .	36.50%	24.34%
(i.e. Operating ratio in respect of selected items.)		
CLASS I ROADS, 1924—		
Total Revenues . . \$5,986,492,120		
Total Expenditures . \$4,558,307,781		
Operating ratio, including Tax Accruals ¹	81.9%	
Freight Train Revenue per ton mile (1923)		1.116c.
Passenger Train Revenue per passenger mile (1923)	3.018c.	
Freight—Average Distance hauled per ton		176.86m.
Passengers—Average Distance hauled per passenger	238.46m.	

¹ 76.1 per cent exclusive of tax.

² For 1890 = 24.06.

CHAPTER IX

COMPETITION OR CO-OPERATION

At various points in foregoing chapters reference has been made to the factor of competition as being a potent influence in contributing to the gradual evolution of present-day arrangements. But the principle of co-operation and combination has been steadily becoming more effective, and has become possible over ever-widening areas.

EARLY DAYS

In the early days, when railways existed only as detached lines here and there about the country, there was no question of competition as between themselves, but when the Manchester and Liverpool joined up with Manchester to Birmingham and extended eastwards to Normanton, Leeds and York, and again the York, Newcastle and Berwick line became connected with the Leeds Northern, the Stockton and Darlington and the York and North Midland ; and the Great Western, Midland and London and North Western systems developed and effected junctions at various points, competition between rival routes grew apace and Parliament encouraged a policy of competition as tending to public advantage, inspired no doubt by a fear of what might happen if these powerful railway systems became any larger through further combination

In the North of England, in 1854, the Leeds Northern Railway (connecting Leeds with the Hartlepoons and Stockton) had become a powerful competitor with the York, Newcastle and Berwick, and in 1854 these two concerns effected an amalgamation between themselves and the York and North Midland, thereby forming out of this tripartite arrangement the North Eastern Railway, which at a subsequent date also absorbed the original Stockton and Darlington Co., and became a powerful monopoly in

the North-East of England, illustrating very practically Robert Stephenson's maxim, that where combination became possible competition was impossible. An interesting point about this particular combination was that it followed a pronouncement by Parliament in 1853 that they intended to sanction no more large amalgamations !

In the 'forties and early 'fifties of last century the controversy over the question of whether the railway policy should be based primarily upon competition or combination was rife. Gladstone, at the time of the passage of the Bill of 1844, which he was mainly instrumental in promoting, expressed his profound distrust of "competition" as a factor or principle at all adequate, or calculated to ensure to the public the policy of railway development then so urgently recognized as necessary ; but the representatives of trade and commerce were not then prepared to forego what was so generally regarded as a healthy rivalry between railway systems, and as providing a useful weapon for use when necessary in their own defence.

GROWING POWER OF RAILWAYS

The power and influence of the railway companies was so conspicuously on the increase that Sir Henry Tyler, for many years the leading railway inspector of the Board of Trade, made use of the memorable words that, if the state did not control the railways, the railways would very soon be controlling the state. When a great amalgamation scheme (between the London and North-Western and the Midland Companies) was before Parliament in 1853, the legislature not only refused to sanction it, but passed a general resolution (at the instigation of Lord Cardwell) to the effect "that no railway or canal bill containing any powers of amalgamation, purchase, lease, working arrangement, or other combination of interest between different companies heretofore incorporated be read a second time unless the promoters agree to strike out all such powers." Even this parliamentary enactment did not, be

it noted, prevent the North Eastern Railway combination referred to in the preceding paragraph.

From that date forward there has been a suspicion that the public is likely to suffer from the monopoly power of big companies and Parliament has, until the post-war period, been very chary of granting, and not uncommonly has refused to grant, proposals for amalgamation between the big companies. The 1921 Act, with its unprecedented amalgamation schemes, has reversed this traditional parliamentary policy of railway competition, but the deeply rooted feeling that a considerable measure of competition must be preserved in the interests of traders prevented what was undoubtedly the intention of the framers of the 1921 Bill, that all the railways should, in the first instance, be amalgamated into one national concern, with powers of devolution to different regional or territorial boards of government.

REVERSAL OF PARLIAMENTARY POLICY

The first Minister of Transport, when introducing the Railways Bill which became the 1921 Act, in the House of Commons, stated that it did not at all follow that because under a system of competition and private enterprise there had been such a great development in the past that the same system would be equally suited to the needs of the future. And, speaking to the Associated Chambers of Commerce in the autumn of 1920, he queried "The advantages of competition, are they not largely illusory?" Under his scheme for amalgamations and combination of railway forces, he anticipated vast economies which he estimated at a minimum figure of £30,000,000 a year. The new Act is undoubtedly based on the assumption that progress in the future, whether of economies in expenditure, of efficiency in management, or of advantage to railway users, must be conditioned upon a much larger measure of co-operation in the railway world than any that has gone before.

Parliament, however, in passing the recent Act, did preserve a measure of her traditional view, for whilst allowing the amalgamations into four big group companies to be effected, determined that the retention of a certain measure of competition was essential for the good of railway users. But this retention of the spirit of competition—on a larger scale in many directions even than before—has doubtless been one factor in preventing the full realization of the working economies that were hoped for and sanguinely anticipated by Parliament.

CO-OPERATIVE TENDENCY STEADILY GROWING

A leading railway chairman, speaking of the revolution about to be accomplished in the railway world under the 1921 Railways Act, referred to the Act as having accomplished a new triple alliance, namely, between the railway companies, their employees and the traders.¹ This is an indication of co-operation on a grand scale, and though the country may not have entered fully, as yet, into the more advanced relationship so contemplated and expounded by a railway chairman, yet the pronouncement may be taken to embody the spirit of the Act and what it stands for.

Such co-operation over an increasingly widening area would appear to be a quite natural development in industrial life in these days. The growth of true civilization has been said to depend upon the degree of co-operation that can be given effect to in social or national life. And the greater effectiveness of co-operation than of competition in the progress of large enterprises of a public character has been constantly recognized and pointed out by the great leaders, both in statecraft and in economic science. We have quoted Robert Stephenson's dictum as to competition ; we have seen how Gladstone, in 1844, doubted its adequacy for meeting what the public needed from the railways ; we may recall how in 1911 the departmental committee on

¹ Viscount Churchill, presiding at Great Western Railway shareholders' annual meeting, February, 1921.

railway returns and accounts reported that both railways and public would gain by " a properly regulated extension of co-operation rather than a revival of competition " ; and Mr. Cleveland Stephens, at the conclusion of his brilliant study of English railway development and State relationship,¹ suggests that " competition was never at any time a satisfactory method of regulating the railways," and that that was the true interpretation of the meaning of the 1911 Committee's pronouncement

EFFECT OF RAILWAY COMPETITION

On the other hand, we have seen how, in the development or settlement of the existing arrangement of British railway rates and charges, the spirit of competition has come in, time after time, and interfered with the adoption of regular or scientific or orderly and impartial arrangements. We have seen, too, how in the early days of railway history, say prior to 1840, when the railways existed only as detached and more or less isolated pieces of line, each company had its schedule of rates passed by Parliament and framed on a mileage basis, but as soon as the railways became linked up as one system, then competition came in and with it the so-called principle of charging what the traffic would bear.

The Clyde sugar " could not bear " a railway rate to the Midland towns higher than the similar rate from London if it was to compete on an equal footing. The rate for dead meat from Liverpool to London must be an exceptional figure, far below the normal class rates, if it was to continue to come by rail instead of being diverted to the coastwise steamer route.

So we find it was competition which in the case of the Clyde sugar broke down the principle of equal mileage upon which early railway rates were founded ; it is competition that has effectively prevented a rates scale being built up

¹ *English Railways : Their Development and Relation to the State* (Routledge).

on a cost of service basis ; it is competition that is tending to put ports situated at different distances from consuming points on an equality as regards their railway rates, and is robbing those favourably situated by nature of the advantage of their geographical position.

And as long as competition is allowed free play and is not under proper restriction no principles can be expected to hold water.

Once admit competition between two companies "and the whole theory of equal mileage or cost of service rates vanishes into air."¹

WHAT THE TRAFFIC WILL BEAR

The writer of these words (Sir Wm. Acworth) is generally credited with responsibility for the phrase, "What the traffic will bear," a phrase commonly quoted by railway advocates as the "principle" on which the present tangled system of railway charges has been built up. But we can hardly, with any respect for the word or its meaning, call it a "principle." It is a phrase which describes *the method* under which the present arrangements in the aggregate have been evolved. It represents the utmost which a railway manager has been able to get as a charge for conveyance in view of the competitive agencies ready to carry the traffic.

A pertinent illustration may here be given. At the time of the initial construction of the electric tube railways in London large contracts were entered into for the iron segments with which the tubes were to be encased. Some were to be made in the Midlands, some on the Tees, and a Stockton firm secured an order for 110,000 tons. The railway rate, Stockton to London, as quoted in the rate books, for traffic of this kind, was 16s. 8d. per ton, S. to S. O. R., and there was an "exceptional rate" also of 15s. per ton with the condition of 4-ton lots attached. But this figure was not considered satisfactory by the senders, who

¹ Sir Wm. Acworth (see page 44).

found they could send much cheaper by coastwise steamer transport, and arranged for the traffic to go accordingly by water. At the last moment the railway company heard through its canvassers of what was happening, and as it was realized that the order was too good a thing to be missed, promptly quoted a rate of 10s. per ton for this big lot of traffic on condition that the traffic was to be sent in full train-loads of 45 wagons, each wagon being loaded with eight tons. The senders accepted these conditions and the traffic all went by rail, the receivers taking delivery at the London railway stations, and the trains of traffic being dispatched every other day or at the rate of three train loads a week, and continuing between two and three years. If such rate continues to-day on the rate books it will no doubt disappear on "the appointed day" amongst many other obsolete figures which are interesting reminders of bygone history. It is even now a matter of controversy as to whether such a low rate as 10s. per ton (or its present equivalent of 15s. to-day) can be looked upon as a paying proposition to the railways, but it suited the railways and it secured the traffic to the rails.

Whilst under the stress of competition a method of rate-making has come into being, based upon "what the traffic will bear," under which exceptional arrangements have become the rule, it may be hoped that in the more co-operative regime upon which the railways have now entered some greater and wider application of principles and tariffs will be possible.

GROWING WORLD-WIDE COMPETITION

At any rate this wider measure of co-operation is urgently necessary in view, firstly, of the increasing competition from other methods of transport, such as coastwise steamer and road cars (may we not also in the future have to include air transport)? and, secondly, the necessity of providing the best possible transport facilities for the country's internal industry as a whole, in view

of the growing intensity of world-wide competition with other nations.

These constitute two very urgent reasons why the railways as a whole should have a system of charges founded on a basis of all-round impartiality and of reasonableness in amount; and, at the same time, simple and easily to be understood.

If in the matter of our railway and transport charges reliance is continued upon the unintelligible method underlying the phrase "what the traffic will bear," as the best that can be devised towards the adoption of a principle in the methods of charge, we shall, with the increasing competition from new directions, find our system of rates and charges drifting more and more into confusion as the result of a policy or practice of universal grab, each for himself on the part of groups of traders or of individuals.

TRANSPORT CO-OPERATION VITAL TO FUTURE NATIONAL PROSPERITY

On the other hand, as we face up to the fact that competition between nations in the great producing industries to supply the world's markets is getting more and more severe, and must continue to do so, we shall become more conscious of the fact that the nation which can adopt the greatest degree of internal co-operation amongst all classes of industrialism, as well as within each individual industry, is bound to have the advantage in international competition.

The writer believes this to be the keynote of our future success as a nation so far as its industries are concerned. Not only must we have all the railway companies working together as one great national system, determined to provide the high watermark of transport facilities, both in efficiency and in adequacy, but we must go farther and adopt a policy of co-operation and co-ordination between the various transport agencies—roadway, railway, waterway and port authorities. A house divided against itself,

as our industries have been, cannot stand ; and when one considers what a small nation we are as a country, the argument seems more and more convincing the more one thinks of it that the great hope of the future for Great Britain is in the development of the community spirit and co-operative (instead of competitive) action for the nation as a whole.

The claim that the principle of competition embodies the law of life cannot be supported by science. It is truer to say that competition belongs to the lower orders of life, and that it is as co-operation and the community spirit are developed and have free course that a nation or people rises in the order of civilization.

THE HIGHER TYPE OF COMPETITION

So whilst the baser idea of competition, that of undercutting or stealing a march one against another, may with advantage disappear, the competition for service or efficiency, for adequacy of performance (what Sir Oliver Lodge would call emulation¹) can happily never be eradicated from the characters of men.

In professional ranks it is well known that a certain rivalry or ambition to excel is always animating human effort. An engineer will always aim at producing a better

¹ " The distinction between competition and emulation has been very well expressed by Sir Oliver Lodge, who says : ' Emulation is not competition. Emulation is wholesome and right as a stimulus. It is not the beef and pudding of life, but it may very well be considered the salt and mustard. Competition is the wrangling of savages round a table at which they might sit at peace and pass each other the victuals. It is the grabbing of the dishes as they are brought on by the waiters of Providence—the laws of nature ; it is the filching from weaker neighbours of their portion, so that one is hungry and another is drunken. Emulation is the aspiration of a soldier to lead a forlorn hope, the desire of a student to make a discovery, the ambition of a merchant to develop a new country or establish a new route. Competition is the snarling of dogs over the same bone. Emulation is the desire to do a thing better than it has been done by others. Competition is the desire to do instead that which is equally well done by them.' " (From *Socialism and Syndicalism*, by Philip Snowden.)

engine than any that has gone before, or a bigger bridge which shall put in the shade all predecessors.

So a general manager or engineer of a great railway company will always aim at providing service or accommodation surpassing any that has gone before. He will always like to have his particular system known as the best-managed and most efficient in the country.

This vying for excellence, or competition for service, we are in no danger of eliminating by arrangements for greater co-operation between colleagues in the same branch of industrial service ; and it is only by a confusion of thought that we conclude that improved service or greater efficiency is imperilled, because we are limiting that foolish competition which aims at stealing traffic or undercutting of rates.

THE BOGEY OF MONOPOLY

The same bogey was paraded before the public in 1854, when the three (then) great railways in the North of England, the York and North Midland, Leeds Northern, and York, Newcastle and Berwick Companies were about to be amalgamated, and in that year became the North Eastern Railway system. But 18 years later, when a parliamentary committee were called upon to pronounce on the whole subject of amalgamations of railway systems, what was their verdict ? They specifically quoted the case of the North Eastern Railway as an outstanding illustration of a well-managed monopoly. The following is an extract from their report—

The case of the North Eastern is a striking illustration (of a beneficent or well-managed monopoly). That railway, or system of railways, is composed of 37 lines, several of which competed with each other. Before their amalgamation they had, generally speaking, high rates and fares and low dividends. The system is now the most complete monopoly in the United Kingdom. From the Tyne to the Humber, with one local exception, it has the country to itself and it has the lowest fares and the highest dividend of any English railway.

It has little or no litigation with other companies. Whilst complaints have been heard from Lancashire and Yorkshire, where there

are so-called competing lines, no witness has appeared to complain of the North Eastern Railway, and the general feeling of the district which it serves appears favourable to its management.

If Parliament had supported whole-heartedly the original proposals of the Railways Bill of 1921 for a more complete amalgamation, may it not be that we should now be much nearer than we are to a repetition of the beneficent results of complete monopoly as recorded by the 1882 Committee in the paragraph quoted above ?

CHAPTER X

THE COMING OF THE RATES TRIBUNAL

As far back as 1870 a need was felt by railway users for some tribunal to deal with questions of complaint against the railways, and these complaints centred naturally round the question of rates and charges. It was upon a proposal for a large amalgamation (that between the London and North-Western and Lancashire and Yorkshire Railways) that Parliament took alarm in 1872, as they feared the effect of a reduction of competition, and this circumstance resulted directly in a parliamentary inquiry under the committee of 1872.

THE RAILWAY AND CANAL COMMISSION

One sequel to the labours of this committee and perhaps its most important result (beyond the publicity as to railway affairs which such a comprehensive inquiry necessarily created), was the appointment of a tribunal to deal with matters of rates and charges, which became known as the Railway Commission (afterwards to become the Railway and Canal Commission), whose function was to hear and determine complaints against the railway companies, particularly with respect to rates and charges, and to fix what are reasonable sums for the railway companies to charge in respect of terminals.

This Commission took effect as from 1873. It consisted of three members, who were required to give the whole of their time to the duties of their office. The Act prescribed that one was to be a representative of the railways, qualified by experience, and one was to be a qualified lawyer. The first Commissioners fulfilling these two requirements respectively were Mr. Price, late chairman of the Midland, and Mr. Macnamara, Q.C. ; whilst the third was Sir Frederick Peel, who did not conform to any parliamentary

specification, but was described by a member in the debate in the House of Commons as "a Christian at large."

Let it be noticed that it was an exaggerated fear of the power of a growing railway monopoly, and the popular belief in the value of competition, that led to the creation of this tribunal as providing an increased measure of railway control in the interests of the commonwealth.

Under the Railway and Canal Traffic Act, 1888, the functions and powers of the Commissioners were somewhat enlarged: they were authorized to order a railway company to provide facilities where reasonable facilities were proved to be non-existent: it was their duty to see that the various provisions of the 1888 Act were properly administered: but their main duty continued to be to hear and determine complaints from traders or associations of traders in regard to rates and charges.

It was, however, only upon special appeal by a trader or group of traders or by a railway or canal company that the Railway and Canal Commission took any action, and they then sat and heard evidence on the same lines as any other legal tribunal. Their function was advisory rather than executive. They would decide upon the legality or reasonableness or otherwise of any charge made by a railway company, but considered it as going beyond their function to fix what a rate should be.

Proceedings before the Commission have always been very costly and have usually been very dilatory, running at times into the second, third or fourth year after application, before a decision could be obtained; and the Tribunal has never secured the full confidence of traders as providing a body on which they could rely with any confidence for obtaining just and reasonable charges.

The growing feeling that there must be something wrong in a system based upon "exceptional" charges as to 80 or 90 per cent of the traffic conveyed, and the distrust of so vast a rate-making power being in the hands of railway officers, whose main object is to secure traffic to a particular

system at all hazards, rather than to aim primarily at the good of the commercial life as a whole, culminated in the establishment of a new tribunal under the 1921 Act, whose function was to be of the widest character.

THE NEW TRIBUNAL

- In the first instance, vested with authority to create and determine a new system of rates and charges upon railway traffic for the country at large, they will in the future, i.e. after "the appointed day," have full power to determine the reasonableness of any charge made by any railway company for services or for accommodation, and *to decide and enforce* the charge which they pronounce to be reasonable. Under this new arrangement the railway companies to a large extent become relieved of the rate making function : the responsibility passes on to the shoulders of the new tribunal. It is a great responsibility, and it assumes, of course, that a rates tribunal appointed *ad hoc* on the lines laid down in the Act, is more likely to be able to evolve a rates and charges system that will develop the trade and traffic of the country, and one which will be just and impartial all round and free from undue preference in any direction, than under a system which allows each railway company's goods manager or a group of goods managers to fix the specific rates which a particular company is interested in.

The Rates Tribunal takes over from the Railway and Canal Commission all duties and responsibilities in the matter of railway rates and charges which the Commission has been in the habit of accepting and performing. It, like the Commission in 1873, also consists in the first instance of three members, the Act prescribing that the chairman must be an experienced lawyer, one of the three must be a person experienced in railway business, and one must be a person of experience in commercial affairs. The first members of this Tribunal were Sir Francis Gore Browne, K.C. (Chairman), Mr. W. A. Jepson, formerly a manager of the London and

North Western Railway, and Mr. George C. Locket. They took office at the end of 1921. The Act prescribes they are to continue in office for a period not exceeding seven years. Sir Francis Gore Browne, the President, unfortunately died in 1924, and was succeeded by Mr. Justice W. B. Clode.

WIDE RESPONSIBILITIES

The responsibilities of the new tribunal are enormous, and it has been granted vast and far-reaching powers. When we remember that the success of our industrial and commercial system depends, perhaps more than anything else, upon ample railway facilities and cheap transport, it may probably be said without exaggeration that the Tribunal has, in very large measure, the making or marring of our home trade in its hands in the decisions which it will have to come to.

The Act constituting the Tribunal and prescribing the complete revision of our rates and charges system was passed in 1921, and the Tribunal got to work before the end of that year, but at the time of writing they are far from finishing their first task of revision, and this length of time alone may be taken to indicate that the work on which they have been and are engaged is gigantic in its character. The "appointed day," when the new and revised rates will take effect, which has been tentatively fixed successively for 1st January, 1925, 1926 and 1927, appears now to be likely to recede still farther into the future, for after the new rates are determined the preparation of new rate books which the public announcement of charges involves, will alone necessitate a period of several months before the charges can properly take effect.

DUTY OF THE RATES TRIBUNAL

Let us see if we can summarize shortly the task which is before the Tribunal. Is it not this? The establishment of a new system of rates and charges on all classes of traffic which are conveyed or conveyable by railway on such lines

as will most surely lead to a general expansion of the country's trade all round, and that such system, whilst primarily aimed at securing to the railway companies an adequate revenue, must not fail to comply with the following requirements—

1. It must maintain rates upon a reasonable basis for all classes of traffic.
2. It must refuse to grant any rates which would secure any undue preference to or against any person or place.
3. It must be simple and intelligible and so arranged that everybody desiring to send traffic by rail can easily determine or calculate in advance on what scale of charges he will have to pay for his traffic.

SIMPLICITY IMPORTANT

Conditions 1 and 2 above have been sufficiently dealt with in other chapters, but here a few words are desirable under the head of simplicity. A simple system, whether a fixed flat figure or one determinable upon a scale, is in itself a stimulator of traffic, just as the converse—complexity or difficulty in finding out the charge—is in itself a deterrent to the flow of traffic. Anybody can find out from a printed scale which can be carried in the pocket how much it will cost to send a parcel any distance in England by parcels post or by passenger train ; but to send such an article by railway goods train can only be discovered by a visit to the nearest railway station, and there is often such an air of apparent mystery arising from the number of documents or persons which need to be consulted when the rate is obtained that the postal system is regularly preferred.

Simplicity in quotation of rates itself encourages traffic. There was (before the War) a simple scale in operation for the conveyance of milk by rail. Any milk forwarder knew that the carriage of his milk would cost 1d. or 1½d. to 1½d. a gallon, according to whether it was over or under 100 miles. This is a good illustration of an easily-understood and simple scale of charge. Motor-cars and a few other

selected commodities, as well as passenger train parcels, are charged on a zone scale.

But why should milk and motor-cars be favoured with a regular scale or tariff to the exclusion of exceptional rates, whilst practically all other important commodities are carried under exceptional rates, varying in basis according to destination? Why cannot there be a regular tariff available (as with milk) the whole country over, for example, for pig iron, for grain, for timber, for provisions, etc.? To quote upon differing bases for different districts of the country must almost inevitably lead at once to preferential treatment. This is one of the crucial questions that the Tribunal must decide upon at an early date.

RECOMMENDATIONS OF THE RATES ADVISORY COMMITTEE

When the Advisory Committee on railway rates (i.e. the body which, sitting from 1919-21, was the forerunner of the Rates Tribunal) reported to the Minister for Transport, they tabulated the principles which they considered should be given effect to in the establishment of a new and more equitable system of rates. They urged that exceptional rates, if they could not be abolished, must be revised and reduced in number and should be systematized. The principles they urged should be adopted were a definite reduction on a percentage basis in respect of the companies being relieved from damage or loss, and also a percentage reduction in respect of the conveyance of large quantities. The report also expressed the view that, by arranging a tariff which would embody the percentage reductions above-named for specific considerations, the major part of the exceptional rates might be got rid of.

In the chapter dealing with exceptional rates will be found (page 50) the proposals made by the Advisory Committee as to the lines upon which they proposed that scale arrangements should be substituted for exceptional rates—at any rate in so far as the factors of quantity of

traffic or of risk conditions had been the *raison d'être* of such exceptions.

It is difficult to see how a system which is *founded upon* exceptional rates can be fair all round and free from the suspicion of undue preference. To the writer it would appear as though the success or failure of the work of the Rates Tribunal must very largely depend upon its treatment of the exceptional rates question—upon whether such rates can, at least, as a system be superseded. It can be easily understood that every trader would like to have an exceptional rate, *provided it is in his own favour or prejudices his competitor.*

CERTAIN ALTERATIONS ALREADY DETERMINED

The work of the Rates Tribunal, as compared with that of the Rates Advisory Committee, has been to some extent made easier by the fact of the Railway Rates Act of 1921 having passed Parliament. Under the provisions of this Act certain principles of charging have been definitely decided upon and it may here be well just to recall these. They are—

1. A new classification of goods has been adopted. The new classification will have twenty-one classes, with an extra one in respect of coal and coke, in place of the eight classes of the current classification. This replacement of eight classes by twenty-two can only be counted as simplification if it means the abolition of the greater part of the "exceptionals."

2. Charges for cartage, in collection or delivery, are to be separately quoted and recorded. In other words, all rates are to be normally fixed on a "station to station" basis.

3. All normal rates are to be on the basis of company's risk, and if an owner's risk rate be granted at the request of a trader or sender or receiver of goods, the reduction of rate in respect of the O.R. condition is to be fixed at such amount as will *represent the value of the risk from which the company has been relieved.*

Compliance with these conditions ought to go a long way to help the Rates Tribunal in the discharge of its heavy duties, for it certainly introduces some points of principle into what has been, and is to-day, largely a chaotic arrangement ; though as long as exceptional rates exist in anything like the proportion they do to-day, the work of the Tribunal is bound to be heavy. Indeed, if they continue to have to fix rates according to the separate circumstances of each flow of traffic, instead of upon each commodity as a whole, it is difficult to see how they will ever be able to function satisfactorily.

SECURING AN ADEQUATE REVENUE

We have stated that in the fixation of rates the Tribunal must have as a primary aim the securing of an adequate revenue to the railway companies. This is one of the leading factors embodied in the 1921 Act. Under this Act a "standard revenue" is fixed and defined. The railway rates are to be determined at such figures as will yield a standard revenue, and above that datum line any excess of revenue receipts are to be annually (or at such periods as may be agreed) allocated in defined proportions to the public who use the railways by way of lower charges, and to the railway companies themselves, the former taking 80 per cent of the surplus. The Tribunal is charged with the duty of regulating rates and charges on this standard revenue basis.¹ With this in view, it will have to review

¹ Decisions are being come to by the Rates Tribunal concurrently with the writing of this book. An important stage has been reached by the Tribunal in the determination of the exact figures of the "standard revenue" in respect of the four large railway companies. This has been fixed by the Commissioners at £45,218,523, and allocated between the companies as follows—

L. M. & S. Railway . . .	£18,775,180
L. & N.E. Railway . . .	£13,128,505
Great Western Railway . . .	£7,171,551
Southern Railway . . .	£5,843,287

and this means that if these figures of net revenue are exceeded in any considerable degree the Commissioners will have to consider whether charges should be reduced, or if they are not attained, whether increases should be made.

rates and charges annually or biennially, or at such periodical intervals as it may determine best suits the needs of the situation generally. The Act prescribes that at any rate for the first two years following upon "the appointed day" as from which the new rates will take effect, the review must be at the end of each year.

The 1921 Railways Act contains no declaration of public policy for the railways, such as is contained in the American Transportation Act, 1920.¹ It would have been of great help to the Tribunal, doubtless, had there been such, though it would necessarily have had to take a very different form. Instead of such specific declaration, however, the aim of the Tribunal may be assumed from its main function, which is to maintain the standard revenue of the companies, and periodically adjust rates and charges so as to maintain actual earnings as near as may be to standard, whilst at the same time observing the essential principles laid down of reasonableness, impartiality and simplicity. Further than this, it is laid upon the Tribunal, under Sect. 58 (2) of the Act, in fixing charges to have regard to the means which in their opinion are best calculated to ensure in the public interest the maximum extension and development of goods and passenger traffic.

AN AMERICAN RATES TRIBUNAL

The coming of the Rates Tribunal has a somewhat remarkable historic parallel in the advent of the Inter-State Commerce Commission into the railway administrative life of the United States. Three Commissioners were appointed in 1887 for the very same object as in England, viz, to try and restore some order into the chaotic state of railway rates administration as it was in America at that time. Irregularities in the way of secret rebates were rife in the

¹ Transportation Act, 1920, Section 500.—"It is hereby declared to be the policy of Congress to promote, encourage and develop water transportation service and facilities in connection with the commerce of the United States and to foster and preserve in full vigour both rail and water transportation."

States, far exceeding anything that was ever possible with us, and there was a widespread prevalence of "moral obliquity" in connection with railway rate-making.

The Inter-State Commerce Act of 1887 in addition to providing for the appointment of three Commissioners with power to hear and determine complaints and grievances, decreed that rates must be reasonable in amount and free from undue preference, or "discrimination" as it was called. At first the Commission steadily grew in influence and was supported by the railway executives, but in a few years a revolt took place on the part of railways and carriers and, in 1897, not only was its power to determine just and proper rates contested and a case taken before the Supreme Court of Judicature, but the Supreme Court decided that the Commissioners' power was only an advisory and judicial one, that it could not determine or fix rates, which was held to be an administrative function, and must be left with the railway executives. This decision entirely broke the power of the Inter-State Commerce Commission, and the railways thereafter set aside its decisions and openly defied it. But they overreached themselves. The public in the early years of the present century again began to realize that the railways were tyrannically exercising their monopoly power against them as travellers and users, and President Roosevelt went into power in 1904 largely on a policy of "curb the power of the railways." His policy of the "thick stick" proved effective, the Hepburn Act was passed in 1906, not only restoring to the Inter-State Commerce Commission the powers of which they had been deprived nine years before, but giving them greatly enlarged authority. A further extension of power was given in 1910, and since that time the Commission has been a growing force in the railway policy of the great Republic and has, of recent years, replaced the "moral obliquity" régime by a system based on sound, impartial, and well-understood principles. It has practically abolished the practice of "discrimination,"

which, in American railway parlance, was the parallel in the Republic to our "exceptional" rates. The achievements of the Inter-State Commerce Commission in the purifying of American administrative life form a remarkable and, indeed, a romantic record.

As a study in achievement the record of the progress of the Inter-State Commerce Commission in relation to railway administration is greatly to be commended, and a further account of what has been done is given in the next following chapter.

CHAPTER XI

RATE-MAKING PROGRESS IN AMERICA

THERE is so much striking analogy between America and Great Britain in the development of the relationship between the railway system and the community which it serves, that a study of recent developments in the former country is well worth while to anybody who is following in any detail the course of railway events at home.

STUDY OF AMERICAN PARALLEL ADVANTAGEOUS

In the United States and in Great Britain we have the two outstanding world examples of adherence to the principle of private enterprise, when the governments of foreign countries and of our own dominions across the seas are to an increasing extent assuming possession and management of their railways. The great difference between the two Anglo-Saxon speaking countries is in their size and area, the United States having about 250,000 miles of railway, compared with less than 20,000 miles in our own island. In the case of both countries the Government took possession of the railway system during the war, both peoples insisted upon a return to private ownership at the conclusion of war, both nations passed a comprehensive Act of Parliament remodelling the conditions and outlook of the whole railway systems, each Act of Parliament prescribed consolidation of the railway systems into a limited number of groups, and limited shareholders' dividends by fixing a datum level for net revenue, from any excess over which the public who use the railways are to benefit in reduced charges ; and in both countries, councils, upon which the workers are given a voice in the determination of their wages and conditions of service and in certain questions of management, have been set up, and also in both the power and function of rate-making is

taken off the shoulders of the railway companies and placed upon a tribunal of experts chosen by the State. The parallel is, indeed, a remarkable one.

THE INTER-STATE COMMERCE COMMISSION

The institution of a special tribunal to supervise with executive powers the function of rates regulation is, however, no new policy in America as it is with us at home. The Inter-State Commerce Commission was called into being in 1887 with the object, firstly, of regulating rates upon traffic passing through more than one State, and, secondly, of fixing rates on a reasonable and non-discriminatory basis. The record of how this Commission has gradually come forward into a position of greater and greater responsibility and authority until it has practically rooted out of the public life of the United States of America the great evil of discrimination in railway rate-making, is one of the most fascinating accounts of development in democratic control in the government of a great country. Under the new American Railway Act, the Transportation Act of 1920, widely extended authority has been placed upon the Inter-State Commerce Commission, particulars of which we shall refer to later. It is with the action of the Commission in regard to railway rates and charges that this chapter is intended primarily to deal, for a review of what has been accomplished in America in the way of the restoration of order out of what was verily a condition of chaos is opportune at the present time, when our own Rates Tribunal are grappling with the problem of trying to evolve a new system in Great Britain.

It has been shown how the unsatisfactory, almost chaotic, condition has been brought about largely by the exceptional rates system which years ago established itself as the main method of rates quotation in Great Britain. But in America the conditions in regard to rate-making were, indeed, prior to 1887, worse than chaotic. They were irregular, inequitable and of moral obliquity. Moreover,

the various states were independent of each other in matters of railway government, and they were as jealous of their own separate sovereignties as in recent years have been the various states of Europe. Only by slow degrees in more recent years have the regulations of state and federal supervision become co-ordinated. Prior to 1887, the anomalous position existed of each state being able to fix and control rates within its own territory, whilst it had no jurisdiction whatever over a through rate on traffic passing through its domain, not even as regards that portion of the through rate which was attributable to the railway within its own confines. It was the confusion resulting from circumstances of this nature that led directly to the establishment of the Inter-State Commerce Commission.

IRREGULARITIES IN U.S.A.

But apart from these anomalies and the confusion arising from the clash of differing authorities, the irregular practices in the way of secret allowances, indirect rebates and direct preferences were most serious. To secure traffic from competitors all sorts of devices for the manipulation of railway rates were unscrupulously resorted to. One of the commonest was in the case of traders who had sidings or "private railways," as they were called, to make a private division of the rate with the "private siding owner," under which a large proportion of the total rate was refunded to the latter, and the statutory publication of the full rate, it was contended, made compliance with the Act. "Blind billing" was another method. Under this scheme traffic was invoiced to another station than its real destination, to some station to which a lower rate was in operation, and then careful arrangements were made for the invoice to be secretly transferred to the station of the traffic's real destination. What was known as the "midnight tariff" was another not unusual method of giving preference. A special rate or tariff was adopted for 24 hours, to expire at midnight on the first day of operation. But private notice

had been given to the trader who had the traffic to dispatch, and he then arranged to get his traffic forwarded on the day when the special rate was in operation. The rate was then withdrawn before anybody else was able to derive advantage from it.

One case was brought to light where the cashier of a private trader was made "agent" to the railway company, and in that capacity he was given commission representing enormous rebates to his firm. The very foundations of commercial morality were being sapped by these underhand discounts and rebates which operated on so wide a scale.

INTER-STATE COMMERCE ACT, 1887

The Inter-State Commerce Act of 1887 then enacted—

1. That all charges must be reasonable, and that unjust or unreasonable charges are illegal.

2. That any discrimination for similar services by means of any special rate, drawback, rebate, or other device, is illegal.

- 3 The "long and short distance" clause was enacted, under which no railway company might charge more for a shorter distance than for a longer one, the shorter one being in the same direction of line as the longer one. This clause was, however, qualified by the addition of the words "under substantially similar circumstances."

Though there were many other important clauses, such as Sect. 6, which required the printing and keeping open to public inspection of all rates and fares, the points above set out are the provisions which tended towards the elimination of the pernicious system of "discrimination" (or the preferential treatment of traders).

Under the same Act the Inter-State Commerce Commission was established to give practical effect to the provisions of the law.

The main features of the new law, i.e. the suppression of "discrimination," the insistence upon reasonable rates, and the giving effect to the "long and short haul" principle ;

the securing of a more impartial scheme of charges and the elimination of illicit and unfair practices were for the ten years succeeding its enactment effectively administered, with great and generally recognized advantage to the commonwealth. The findings of the Commission became increasingly recognized as furnishing new and desirable standards of action. The Commission exerted steady pressure upon the railway companies and obtained increasing power. When a complaint was referred to them they not only pronounced the complaint justified when the evidence showed it to be so, but they would order a railway company to adopt such a revised rate as they considered to be right and reasonable, and to put such altered rate into full force and effect. After ten years of such steadily growing influence, however, a railway company (the Cincinnati, New Orleans and Texas Pacific Co.) challenged the right of the Inter-State Commerce Commission to give definite orders of this kind, contending that its functions were only judicial or advisory, and that it had no right or power to go beyond a pronouncement as to the injustice or unreasonableness of the rates or arrangements complained of. The railway company contested the case before the Supreme Court of Judicature in the States in 1897 and obtained a decision in its own favour. The decision was important, the actual words in which the pronouncement was made being as follows—

It is one thing to inquire whether the rates which have been charged and collected are reasonable—that is a judicial act, but an entirely different thing to prescribe rates which shall be charged in the future—that is a legislative act . . . These considerations convince us that under the Inter-State Commerce Act the Commission has no power to prescribe the tariff of rates which shall control in the future

CURTAILMENT OF COMMISSION'S POWER

This was in 1897, and the immediate effect of the decision was that carriers began boldly to set at defiance the findings of the Commission and refused to obey its orders. For a time the power of the Inter-State Commerce Commission

was seriously curtailed, and the railway companies became more and more daring in setting aside the authority of the Commission. Nor was this the only decision which for a time weakened the Commission's authority. A few years later the Supreme Court reversed a decision of the Interstate Commerce Commission on the vexed and contentious question of the "long and short haul" clause—Clause 4 of the 1887 Act. In 1893 a test case was before the Interstate Commerce Commission at the instigation of traders, against the Alabama Midland Railroad. The original "long and short haul" clause of the Act of 1887 provided, as has already been pointed out, that the charge for a short haul was not to be higher than for a longer haul in the same direction of journey, *under substantially similar circumstances*. The effect of the clause had been to a large extent nullified by the contention of the railway companies that if there was competition by a competing line of railway in the case of the longer haul that in itself constituted a substantially dissimilar circumstance, and Clause 4 could not then be held to apply.

In the vast network of the railways of the U.S.A. it had been a common practice to fix upon certain stations strategically situated to be taken as "basing points" for rates to more distant places; they were usually large towns with more than one, most likely several, routes by which they could be reached. But by virtue of their strategic position they became, as junction or concentrating stations, fixed points for rate-making ("basing points"), and to the fixed rates to these places were added the varying "local" rates beyond to make up a through charge. The large stream of traffic to the basing point which enabled good wagon loads and economical working to be arranged was held to be sufficient justification, along with the fact of the existence of the competing route, for quoting rates at lower figures than to smaller and less important places, which were *en route* to the basing point, but which were free from competition. An illustration of such a basing point

might be St. Louis or Altoona or Chicago for rates from New York. Such a point was, in fact, Montgomery, Alabama, to which rates were granted from Baltimore or New York at considerably lower figures than to Troy, a point *en route* on the direct line to Montgomery. The respective rates charged from Baltimore on first class goods were, to Montgomery 106 cents per 100 lb.; to Troy, 109 cents, although the latter was 52 miles short of Montgomery and on the direct line. This departure from the "long and short haul" provision, it was contended by the railway company, was justified because there was a substantial dissimilarity of circumstances by virtue of the alternative competitive routes, as well as a good water service, in the case of Montgomery. But the Inter-State Commerce Commission refused to recognize the dissimilarity of circumstances, and held that there was no justification for such a serious departure from the spirit of the inter-State traffic legislation.

The decision, it will at once be recognized, was a very important one as affecting the compilation of rates, and the railway companies were not prepared to let the matter rest. They took steps to appeal to the circuit law-courts, and they obtained a decision in their favour as against the Inter-State Commerce Commission judgment, and, on appeal to the Supreme Court, that august body confirmed the pronouncement of the circuit law courts, and by their decision seriously emasculated the power of the inter-State law in its effort to establish fully the principle of the "long and short haul" proviso. This decision of the Supreme Court was given in November, 1897, and in referring to it Professor Ripley says that it marked the nadir of Government regulation in the matter of railway rates.¹

INFLUENCE OF PUBLIC OPINION

Although the power of the Commission seemed to be very seriously weakened by these decisions, the Commission

¹ *Railroads Rates and Regulations*, 1916, p. 473, Prof. W. Z. Ripley.

continued its fight for the establishment of better conditions under very discouraging circumstances, but its power to act or to prescribe reasonable rates was constantly challenged, and another decision of the Supreme Court in 1901 (it was known as the *Chattanooga* case) seemed like a death-blow to the "long and short haul" principle. But all the time there was growing a strong undercurrent of better opinion, an opinion of a public which was getting rather alarmed at the increasing power of the railway companies and was fearful of a possible return to the chaotic and inequitable conditions obtaining prior to 1887, or to any restoration of the monopolistic power of the railway companies: this development of public opinion prepared the way for the further enactment which took place in 1906 when, by an almost sensational *coup* in Congress, a new law giving to the Inter-State Commerce Commission new powers to enable it to deal effectively with railway rates matters was passed by Congress. The pathway towards this radical measure of 1906 was further prepared by the Elkins legislation of 1903, which was aimed at the enforcement of the statutory provisions as to the publication of rates and charges. Any departure from the published tariffs was, under the Elkins Law, held to be a misdemeanour on the part of the railroad company. The recipient of a rebate, as well as the railway company granting it, was held to be guilty, and both parties were made liable to prosecution and penalty. The recipient was to be mulcted in a fine threefold the value of the rebate.

RESTORATION OF POWER TO I.C.C.

In 1904 Theodore Roosevelt came into office as President, and in his annual message to Congress he recommended legislation vesting in the Inter-State Commerce Commission the power to regulate rates; and during the next few years the question of transportation and the position of the railroads loomed large in political and public life. In 1905 a Senate Committee sat continuously with a view to

the study of the whole question, and the railway companies themselves conducted a vigorous educational campaign in the country. Prejudice against the railways, however, grew steadily, mainly because of the Standard Oil discriminations and private car line abuses. In 1906 Roosevelt renewed his message to Congress, and the Hepburn Bill was passed by the remarkable vote of 346 to 7 in the Senate. It became finally operative on the 28th of August, and became known as the Hepburn Law.

The principal points of this enactment were that it extended the power of the Inter-State Commerce Commission: sleeping car companies, express companies, and pipe-lines (which had been grievous offenders) were brought within the Commissioners' authority, which was henceforward to cover all services ancillary to transportation, e.g. collection and delivery, storage and warehousing, cold storage and refrigerating, etc. Secondly, the law gave the Commission power to "determine and prescribe" (strong words these) just and reasonable maximum rates regulations or arrangements to be thereafter observed *and to order conformity thereto*. This enactment at once restored to the Commission the authority which had been taken away from it by the Supreme Court in 1897, and, evidently with this in view, Professor Ripley, of Harvard, speaks of the Act in the following terms—

"The fundamental principle of government control over the most powerful corporations in the country had been fully affirmed. It was an historic event—the most important perhaps in Theodore Roosevelt's public career—and a not insignificant one in our national history"¹

There were other provisions in this Act, such as power for the Inter-State Commerce Commission to make and apportion through rates between transport companies, power to enforce complete publication of accounts of railroad operations in standard form, abolition of railroad passes to traders' representatives, etc.

¹ *Railroads Rates and Regulations*, page 499.

This legislation, as has been indicated, gave new dignity and authority to the Commission, which responded energetically to the measure of new strength now given to it, and it rapidly made its power felt. Irregularities were one after another wiped away.

LEGISLATION OF 1910

In 1910 came additional inter-State traffic legislation, giving further power to the elbow of the Inter-State Commerce Commission. Up to that date the loophole in the long and short haul clause provided by the words "under substantially similar circumstances and conditions," which the original legislation of 1897 contained, had been retained, and not only retained, but it had been continually widening, as the whole flood of "circumstances and conditions," included under the term of "competition," had been let loose by the decision of the Supreme Court. These words, which had caused most of the trouble in the courts, were now swept away, and the power of the Inter-State Commerce Commission was again distinctly strengthened. In place of the power to create exceptions being left with any railway company which thought it could set up the plea of "circumstances of competition," the only exceptions to the long and short haul principle were such as should be expressly sanctioned by the Commission itself, after full hearing of evidence. The Commission was further authorized to institute inquiries on its own initiative, whether complaints had been formally made to it or no.

TRANS-CONTINENTAL TRAFFIC RATES

Having now indicated the principal enactments of Congress and the general developments of the powers of the Inter-State Commerce Commission, we may give one specific illustration of the direction in which the Commission, as an administrative body, took action in the way of rate-making. In the matter of the trans-continental traffic (that is traffic passing across from the Atlantic coast

to towns on the Pacific seaboard), the story of how the rates on this traffic have been gradually brought into just and fair relationship with one another and into line with established principles, when separate rates were originally set up in defiance of all principles, is a record both interesting and instructive to anyone who has time to read the story and to study it. We can here give but a brief résumé of successive stages and facts.

During the last quarter of last century this trans-continental traffic has, with the opening of the great rail systems of the West and the development of the inter-mountain country which the railway systems have opened out, become a factor of enormous and growing importance; and up to the end of the first decade of the present century, when the Hepburn laws were enacted, the regulating feature in fixing rates from the eastern States to the western seaboard had been the water competition by coasting steamers either round Cape Horn or to and from Panama, with land transfer across the isthmus. So it came about that the rate from New York to San Francisco and the Pacific seaboard was in many cases quoted at a much lower figure than to other towns on the direct line of route and for much shorter distances, and the effect of this competition was felt over a considerable area inland in the eastern States also. Pittsburgh to Spokane, Washington, for instance, was charged a rate of \$649.44 for a car load of glassware, whilst the charge on the same traffic going through Spokane to Seattle was only \$393.60, although Seattle is 400 miles farther west. The number of such anomalies as this was legion, but the problem as a whole was tackled energetically by the Inter-State Commerce Commission as soon as it had power to deal with the matter as one of the first problems needing adjustment. After much consideration of all the facts the tangled skein was straightened out by a scheme of zones and differentials based upon percentages. Thus, from an eastern zone, embracing New England and the district

near the Atlantic, it was provided that rates to the Pacific might, in view of the vigorous water competition, be lower to the Pacific Coast than to the inter-mountain territory on the way, but such rates to places in this latter territory were not to exceed by more than 25 per cent the rates to the coast.

From an intermediate zone embracing points such as Cleveland and Pittsburgh the differential was not to exceed 15 per cent ; from Chicago, St. Louis, and points east of Missouri, rates to inter-mountain territory were not to exceed 7 per cent above the Pacific Coast rates ; whilst from points west of Missouri there was to be no excess in the rates to inter-mountain territory over those to Pacific Coast points. This sliding scale arrangement is interesting evidence of the scientific care with which the Inter-State Commerce Commission after 1900 began to exercise its new powers. Under this order of the Commission the discriminatory difference against the short haul over the long was never to exceed 25 per cent. It had been as much as from 50 to 100 per cent.

The graded zone system on the lines we have just indicated continued in operation to regulate the charges on trans-continental traffic up to quite recent times, but the trans-continental traffic has been profoundly affected by two factors, namely, (1) the opening of the Panama Canal, and (2) the diversion of the coastwise shipping tonnage during the war to meet the exigencies of Atlantic and ocean transport. In 1918 the special zone and discount arrangement was withdrawn, and various alternative schemes and bases were discussed, one that attracted much attention being based upon a gradation of distance throughout, a basis which would, of course, have given to each station throughout the route the advantage of its geographical position. A basis mainly fixed upon distance was in the end adopted, and as this inevitably meant no small increase in the cross-country railway rates, it gave to the coastwise steamers on their return to their normal sailings, in the

post war period, a chance to regain much of their traffic in competition with the railway lines.

The railway companies have again recently appealed to the Inter-State Commerce Commission to have the sliding scale arrangement applied to the trans-continental traffic, and have such traffic recognized as an exception to the long and short haul principle, but the Inter-State Commerce Commission have now finally declined the application, holding that exceptional measures that may have been necessary for the building up of the trade of the west, when that great area was in its initial and early stages of development, may properly and, with advantage to the community as a whole, disappear when that early building-up stage has been accomplished.

These trans-continental rates are, it will be realized, of very far reaching effect, and the way in which they have been treated is a good illustration of the thoroughness and broad judgment which mark all the decisions of the Commission, presiding as it does over the railway destinies of so extensive a system.

SUCCESS OF THE INTER-STATE COMMERCE COMMISSION

It would appear to be continuously growing in the esteem and confidence of the American commercial public. As far back as July, 1912, just a quarter of a century after the first inter-State commerce law, such progress had been made in this matter of regulation of railway rates that Mr. Chas. A. Prouty, the Chairman of the Commission, was able to state in an address at Kansas City: "The creation of the Inter-State Commerce Commission had two ends in view—to prevent discrimination on the part of the railway companies, and to fix rates which should be reasonable. I believe that these two things have been accomplished." Reflection will show that this achievement is something very much more than that of acting up to a pronouncement against undue preference—the basis of our English law.

It really marks the putting an end to exceptional treatment of an individual or a place at the discretion of an officer or a group of officers of the railway companies, and the giving effect generally to the belief, which would appear to be part and parcel of the creed as well as the constitutional enactment of the American community, that every individual must be guaranteed equality of treatment before the law, and that no low railway rate given as a special privilege can inure permanently to the good of the commonwealth.

The legislation of 1920 (the Transportation Act), which restored the railway systems after the war to their former-owning companies, re-enacted and codified all previous railway and transport statute law and gave additional powers and authority to the Inter-State Commerce Commission. It recognized the importance to America of securing that her transport agencies and arrangements, whether by water or by rail, are maintained at utmost efficiency : in the words of the Act, to be " fostered and preserved in full vigour."

The personnel of the Inter-State Commerce Commission has grown with the gradual extension of its authority from time to time until now, under the 1920 Act, it consists of eleven members.

Many years ago the Chairman of the Commission stated publicly that the United States in its rate-making policy was trying an experiment that had never hitherto been successfully worked out in the history of the world. " It is trying to build, develop and operate its railroads by private capital under rates and regulations fixed not by the owners of that capital, but by the public."

The experiment has since gone far ahead in a history of continuous development, and immense changes have come over the rates systems and general arrangements of the railways of America ; and in many ways 1925 was the most prosperous year of America's railway history. In the handing over to a public tribunal of the main responsibility

for decisions upon rates and fares, Great Britain has followed the example of the States, and we must hope, as time goes on, that we may have no less success. But the change involved has far-reaching consequences, the full meaning of which time only can disclose.

CHAPTER XII

JUSTICE A PRINCIPLE IN RATE-MAKING

MR. GLADSTONE, in that famous speech in which he referred to the enthronement of public right as being a triumph in a region loftier than that of electricity or steam, added, "The foremost amongst the nations will be the one which by its conduct shall gradually engender in the minds of the others a fixed belief that it is just."

IMPORTANCE OF PRESENT JUNCTURE

And justice has its place, and that indeed a place of primary importance, in the consideration of any question concerning the efficiency of our system of railway rates. It is of especial importance at the present moment when the railway companies and the community, as represented by the new Rates Tribunal, are endeavouring to evolve a new system of rates and charges, that all those who are going to be in any way responsible for the new rates should keep in the background, or perhaps, rather, we ought to say, in the forefront, of their minds the fact that any new system of charging, if it is to be satisfactory or successful in any true sense, must be one which will engender in the minds of the public, a fixed belief that the new system is a just and impartial one, free from any suspicion of "undue preferences" and of all "exceptional" rates other than such as may be justifiable on the ground of the existence of really special circumstances affecting the traffic to which they relate, and accepted as such before the light of public opinion.

GENERAL POSITION RE-STATED

At the outset of any inquiry into the direction in which one may look for any reform in our rates system, the following four propositions seem pertinent to the occasion—

1. The present methods of fixing railway charges in

Great Britain are, so far as goods traffic is concerned, mainly without system or principle, "exceptional rates" being fixed in accordance with what the traffic will bear, and these "exceptional" arrangements, it was stated before the recent rates inquiry, applied to probably 80 or 90 per cent of the goods traffic of the country

2. If the new railway rates and charges are to secure the confidence of the public at large, as being framed on a just and impartial basis, it seems clear that the whole system of exceptional rates will, sooner or later, have to be swept away.

3. In more than one or two ways the development of the democratic ideas which are distinguishing the "new era" have found expression in the Railways Act of 1921, and a great reformer (was it not Mazzini?) has said that the rise of democracy means the recognition of justice

4. In view of the position of the case as expressed above, only a really radical reform can meet the present situation, which calls for courageous handling on the part of the Tribunal and the railway authorities, and for a willingness on the part of traders to reconcile themselves to changes, even though some of them may not at first blush seem to be *immediately to their own advantage*.

RATES ADVISORY COMMITTEE QUOTED

Lest this criticism of the present arrangements should appear to any readers to be of too sweeping a character, we may quote from the report of the Rates Advisory Committee, under the chairmanship of the late Sir P. Gore Browne, which stated: "The whole position of exceptional rates requires review. They have grown up in an accidental manner, without system or principle." Again, "We are of opinion that the whole of the exceptional rates should be overhauled and systematized." This is but a repetition of phrases already quoted in the chapter on "Exceptional Rates"; and so long as we have a system of rate-making framed on the basis of what a goods manager or chief rates

clerk considers expedient at the time, and arranged at his discretion in accordance with his idea of " what the traffic will bear," there seems little likelihood of getting quit of suspicions of " discrimination " and " undue preference." The goods manager naturally looks at the matter primarily from the narrow point of view of how he can get the traffic on to his company's rails

We have seen how in America a similar reform of her railway rates has been under consideration. Indeed, in that country over the last 35 or 40 years a great reform has been already accomplished. " Discriminating " rates, as preferential rates for specific persons or places are called in America, have been pronounced illegal, and under the persistent and continuous action of the Commission have now been practically abolished.

RATES TRIBUNAL THE BRITISH COUNTERPART OF I.C.C.

The new Rates Tribunal may be said to be, so far as rates are concerned, the counterpart in Great Britain to the Interstate Commerce Commission in the U.S.A. On what basis, we may ask, will it act in determining the quantum of any charges or the conditions applicable thereto ? In the past the limitation has been that of a statutory maximum prescribed in Acts of Parliament. In the future the Tribunal will decide, after hearing all the circumstances of the case, in accordance with their sense of justice and reasonableness. The broad principles outlined in Chapter I must be observed, and chief amongst these principles is that there shall be no undue favouritism or preference ; in other words, all traders or users of the railways must be accorded equal treatment and given equality of opportunity. This is merely to say that justice all round must be observed. The Advisory Committee, in their first report, stated that they thought it undesirable to fix any maximum in future, as " the Tribunal should be entrusted with the duty of doing justice."

ADVANTAGE OF SCALES OR TARIFFS

Whilst the system of charging "what the traffic will bear" in the judgment of the railway officer of a specific company must almost inevitably lead to irregularity and anomaly: on the other hand, when traffic is charged on a scale or tariff, all suggestion of favouritism or injustice disappears.

It is impossible to think of injustice in connection with our Post Office charges (though we may feel great indignation as to the necessity or otherwise of continuing for so long the post-war increase of 50 per cent). Nor does anybody ever think our railway charge for parcels conveyance by passenger train as unfair or unjust. This is because a regular tariff is in vogue, and parcels are charged according to scale. If departures from these regular scales were made exceptionally there would soon be the gravest of complaints.

We have detailed in Chapter IV four kinds of scale which may be adopted, viz.—

1. The equal mileage principle, under which the rate varies directly in proportion to distance conveyed.

2. The "tapering" scale, where a rate is fixed in relation to mileage or distance, but is so graded that at the longer distance the per-mile charge is lower than the per-mile charge for shorter distances.

3. The principle of fixing rates in proportion only to weight or quantity, but irrespective of distance altogether, as in the case of our letter or parcels post charges.

4. The zone system of compiling rates, which is a combination of the first and third methods named above. It groups together zones of distance, and for each zone farther away from the sending point a higher aggregate charge is made in graded figures than in the case of the nearer zones.

When we consider, as we must, what is the alternative to our present method of charging what the traffic will bear, we seem to be driven back to the question of scales as the most likely "way out."

Scales are adaptable, and they are varied in their make-up. One class of scale may be adaptable to one class of traffic, another to another. As we have seen in America, the blanketing arrangement—the third form of scale set out above—was applied for a time and with great effect to secure a development of new traffic in milk ; and when the traffic was fairly established the description of scale was changed to that of the fourth category set out above—a zone scale.

Both as regards milk traffic and general parcels traffic, the former when 150 miles is reached, the latter at 300 miles, the tapering scale tapers down to nothing for extra miles conveyed, so that a parcel is carried a distance of 300 miles or 400 or 500 miles or any higher distance at the same charge as 300 miles, the charge for which distance becomes thus the maximum for this traffic. We have queried on page 60 whether an extension of this particular principle of maximum in actual charge might not with advantage be extended to many other traffics.

America found it necessary, as she gradually introduced more and more principle and system into her rate-making arrangements applying over so wide an area, to retain a number of exceptional arrangements during her process of transition, but such exceptional arrangements were all subject to being considered and approved by the Inter-State Commerce Commission (her Rates Tribunal) after a full hearing of all pros and cons.

Our Rates Tribunal may have to proceed on similar lines. It looks as though for many years ahead the Tribunal will be saddled with the work of gradually eliminating exceptional rates and arrangements, and with the task of establishing a system so framed as to give equal charging facilities to all alike.

CHAPTER XIII

COLLECTION AND DELIVERY

AT all town stations in Great Britain, and at a large number of country stations too, it has become the practice for railway companies to collect goods for conveyance from senders' premises and to deliver them at the receiving station to consignees' premises. In most other countries the railways confine their operations to the railway system.

RAILWAY CARTAGE STAFFS

For the purpose of collection and delivery a large cartage staff has necessarily grown up at all town stations. At one of the Birmingham goods stations there are 309 horses with vans or rullies and 85 motors regularly engaged in this railway cartage service, and at one of the London stations, which we may quote by way of an example, there are some 170 single and double horse teams, employing 260 horses, and 42 motors daily at work. Over this cartage staff a cartage foreman is in charge, and stables have to be maintained with horse-feeders and stablemen regularly at work. The cost of maintaining and working a cartage staff of this size may work out to from 3s. to 5s. per ton at a country station, running up to anything from 5s. to 11s. or even 12s. 6d. at large town stations, including London. The variation of cost arises through many circumstances; road gradients in the cartage area, traffic congestion in the town concerned, size of delivery area, and character of the prevailing traffic.

If we regard the prime function of a railway company as being the conveyance of traffic by rail from station A to station B, we must admit that cartage on the public highway is not an essential railway function, although it is generally considered to be so by railway officials, who have become so accustomed to count it as such.

CARTAGE NOT AN ESSENTIAL RAILWAY FUNCTION

We may here with advantage look again at the terminal and conveyance diagram given on page 73. Conveyance is the true railway function, but the acceptance, invoicing, loading, and unloading of traffic are also an essential, although a subsidiary, service in securing conveyance by rail. The essential railway functions begin when the company's agent accepts the traffic on the railway premises, and end when it leaves the company's premises at the station of destination. That the company does, in fact, actually collect from senders' premises and deliver goods at consignees' premises does not affect the proposition now put forward. The cartage service is performed by the company as a matter of convenience to traders, but it might just as easily be performed by a public carter or by the trader himself, as is the practice in other countries.

The problem becomes an important one in the light of the provisions of the 1921 Act, and the performance of the cartage service throws upon a railway company the necessity of considering many problems which more properly should fall upon the road transport experts. We shall return to this subject later.

HOW RAILWAY CARTAGE DEVELOPED

It may easily be surmised how the system of railway cartage has grown up. In the earlier days the heavier traffics, sand, coal, bricks, timber, etc., formed the larger proportion of a railway company's business, and as the trader brought these goods to the railway station no question of railway cartage arose for some time. As other traffics developed, however, a group of carters or carriers between town and station sprang up to perform the collecting and delivery services, who formed a connecting link between senders and receivers of goods and the railway system. Such were Pickfords, Thompson McKay & Co., Chaplain, Horne & Co., and many others. Moreover, an important factor to bear in mind as regards early railway

history is that in the first instance most of the railway companies were regarded simply as toll-takers, charging for the use of their railway and leaving traders or road carriers to provide their own carts or wagons, and to perform their own services in loading, unloading, etc. Then when the factor of competition became more acute the railway companies thought it better either to pay existing carting agents to bring traffic to their particular station, or to establish their own carting agency and collect traffic at senders' doors. It was a great inducement for a trader, say, at Nottingham, to send traffic by the Great Northern Railway to York, when a Great Northern team was ready at his door to take it and save him, the trader, both trouble and expense. It was only the miscellaneous general traffic, usually known as class traffic, the traffic in Classes 1, 2, 3, 4 and 5 of the General Railway Classification, that the railways dealt with in this way; and such traffic is generally known as "carted traffic," or "C and D. traffic" (collected and delivered), and practically all railway companies now have their cartage staffs at all town stations for the purpose of collecting and delivering C. and D. traffic. One of the first instructions in the General Railway Classification preface is—

Classes 1 to 5.—Unless otherwise provided, the rates include collection and delivery within the boundaries prescribed by the companies at the various places.

In Chapter II (Classification of Commodities) reference was made to the two conditions, "S. to S." and "C. and D." When it is remembered what a large proportion of rates in operation are "exceptional," and not class, rates, the importance of making use of the distinction will be apparent. Were all rates on the class scales, then a general note as quoted above would, as a rule, meet the case, but very often when an exceptional rate is arranged it is in respect of the very condition that cartage, which would normally be rendered by the railway company, shall be done by the trader.

ROUTINE OF "HANDLING"

Long existing practice has led to railway traffic being divided under the two heads of "carted" and "station to station" traffic. Carted traffic is dealt with in a covered-in shed, as it needs to be protected from the weather; and a very elaborate organization exists within the shed for "handling" the traffic and transferring it from cart or van to railway truck, and vice versa. The "station to station" traffic, on the other hand, is dealt with out of doors, in sidings in the open yard, the railway company providing roadway access for senders' and consignees' carts.

CARTAGE REBATES

It has been stated that carted traffic is dealt with under Classes 1, 2, 3, 4 and 5. The Railway Acts of 1891, which provide maximum scales of charges for these classes, leave to the railway company the discretion of adding a reasonable charge for cartage, and this is kept in mind by the railway companies when rates, or scales of rates, are fixed. It is, however, a very common thing when a scale of charges based on mileage is arranged that it applies equally to all stations, whether the railway does the cartage or consignee takes delivery at the receiving station. Where a trader does relieve the railway company from the cartage service, which the rate is supposed to include, he is entitled to some rebate from the C. and D. rate. This question of the amount of rebate, which should be allowed to a trader off a "carted" rate when he relieves the railway company from performance of the service, has led to much controversy and litigation, as may be imagined, for there is no published scale or regular practice defining the amount which is included for the cartage service. The new Act will put an end to this controversy, for it provides that all railway rates are to be quoted and noted as being normally S. to S., that is, they do not include the cartage service, and where that is performed by the railway company a note of the amount

added to the rate for cartage (collection or delivery) is to be *stated in the rate book*.

1921 ACT PROVISIONS RE CARTAGE

The precise provision of the Act as to cartage is that a railway company "may collect and deliver by road any merchandise which is to be or has been carried by railway, and may make reasonable charges therefor in addition to the charges for carriage by railway, and shall publish in the rate book . . . the charges in force for the collection and delivery of merchandise ordinarily collected and delivered."

It is provided further that at any station where a company ordinarily undertakes cartage it shall, if required by a trader, collect and deliver his traffic to and from the station, but in that event the trader must, if the company wishes it, be willing to allow the railway company to cart the whole of his traffic.

If this proviso had not been added it would have been open to a trader who normally performed his own cartage to call upon the railway company to collect or deliver any unusually difficult consignment or one in any way specially costly to handle, or in other ways to act unfairly towards the railway.

CARTAGE CHARGES

The quotation of cartage charges in the rate book seems, at first sight, to present some difficulty, when the very great variation in cost at the many different stations up and down the country is borne in mind. But after all these charges may probably, without difficulty, be grouped into four or five scales, as, for instance : (1) stations at which cartage costs on an average 2s. 6d. per ton within a mile radius from the station, (2) stations where the cost is 3s. 6d. a ton, (3) 4s. 6d. a ton, (4) 6s. a ton, (5) 7s. 6d. or more a ton, and the reference in the rate book would then be, opposite each station, Cartage Scale (1), (2), (3), (4) or (5), as the case might be. Something of this kind will have to be worked

out to fulfil the provisions of the Act, and such an arrangement would seem to be of a reasonable character and generally free from objection.

It is probable that the practice of the railway companies as to collecting and delivering traffic will continue much as it has been carried on in the past, for it would be certain to lead to much confusion in the goods yards if the senders and receivers of "class" goods were to determine to cart their own traffic; indeed, it is difficult to see as regards many of the existing stations how the private teams or carts coming for or bringing separate consignments could ever be accommodated within the station precincts.

The difficulty of determining what is a suitable allowance or rebate to make to a trader, when he collects or delivers his own traffic which is being charged at a rate based on a scale that includes collection and delivery, has been referred to.

When exceptional rates are quoted, which are considerably below the normal class rate, the condition is usually attached "S. to S." Then no question arises, for this condition throws upon the trader the onus of doing his own cartage; but in cases where a trader performs his own cartage in respect of traffic on which a C. and D. rate is quoted, the allowance due to him in respect of his relieving the company from the cartage work has to be estimated, and the railway company and the receiver of goods in these cases look at the matter from opposite points of view. Where, as in some cases, the rates are compiled by the addition of specific figures for the cartage service, the trader naturally looks upon these figures as the rebate he is entitled to, but the Railway Commissioners have decided differently.

THE "PICKFORD" CASE

In a case tried before the Commissioners in 1907 (*Pickford v. L.N.W.R.*), the decision laid down was that as the rates on the traffic in question were all made up on the basis of

C. and D., and the company's staff and organization were arranged to cope with the traffic as though it were all carted traffic, any figure of rebate could not be more than was represented by the cost which would be saved to the company by not performing the service all round, or the amount included in the C. and D. rates for cartage.

On appeal, however, the case was dismissed, and whilst one of the learned judges affirmed the principle that the trader was entitled to have the sum which is saved to the railway company through its being relieved from the cartage service, another pointed out that whilst the rates were undoubtedly fixed for conveyance partly by train, partly by carts, there was no charge fixed for cartage as such in the C. and D. rates.

If disintegration is asked for, the railway company can allocate to cartage just what they please—much, little, or nothing, the railway company must allocate and may offer to the trader the amount so allocated.

In view of this somewhat complex and inconsistent legal decision all parties may be thankful that the ambiguity will be set at rest when the new and revised rates come into operation at "the appointed day," by having definite figures fixed and quoted for every cartage service performed.

MOTOR HAULAGE

With the advent of motor traction on the roads new problems have come along demanding the consideration of the railway authorities, all of whom have now a considerable proportion of motor delivery and collection vans or rullies at their town stations. The Ministry of Transport returns show, for example, that at—

Manchester (London Road)	
there are 260 horses and 34 motors	
Birmingham (Curzon Street)	
there are 390 horses and 85 motors	
London (Nine Elms)	
there are 260 horses (170 teams) and 42 motors	

There is much discussion amongst the authorities as to the relative merits and economies of motor *v.* horse traction

for railway cartage purposes. The Ministry of Transport returns show on the face of them that the actual cost per ton is definitely and clearly lower than in the case of the horse teams. But this may be only superficial, and is by no means a complete story. Where motors have been introduced a selection of traffic has been made for them to handle, care being taken to allocate to the motors that traffic which, owing to its nature or the longer town haul (the farther delivery points being taken for motor haulage), will give the best results for the experiment. If motor traction were introduced *in toto*, i.e. if the whole of the traffic at a goods station, good and bad alike, were handled by motors, probably the cost of working per ton would come out at a very different figure. The only way of making experiment which would give a fair comparison would be on the basis of the traffic dealt with in the two cases being the same or similar.

One other point is worthy of mention in this connection, namely, that it is almost impossible to obtain the best results either as regards horse traction or motor traction from divided responsibility over cartage arrangements. Supervision of an entirely different character is required for motor haulage as compared with horse haulage. In the former case a knowledge of mechanical details is necessary, in the latter case an agricultural type of mind or some experience of farming, or at least a knowledge of horses, would be a main requirement. It will be understood how difficult it is for one who is a lover of horses to throw his whole energy into a development which is likely to mean the elimination of the horse.

ROAD HAULAGE BRINGS NEW PROBLEMS

We have already pointed out that the delivery or collecting of traffic by motor brings in its train the necessity of considering many problems which are not really railway problems at all. For instance, which make of motor wagon is the most suited to the traffic circumstances of varying

towns, which the best method of keeping in repair and efficiency a fleet of vehicles, etc.

These problems need much concentrated thought in the light of experience in these days of rapid mechanical development and improvement, and there are strong grounds for the opinion that all such problems as have just been named are much more likely to be tackled satisfactorily by the expert road motor owner and user, whose mind is being constantly and continuously occupied with this class of work. It would only be what one would naturally expect that the most efficient and also the cheapest, because most economical, service of road transport would be provided by road haulage contractors rather than by a railway company, whose function is that of providing satisfactory and adequate *railway* facilities.

In America the railway companies do not undertake the collection or delivery of goods traffic; this is left to private cartage undertakers, or to senders and receivers to bring their goods to the station premises or to take them away by their own teams. The same practice operates in Germany and most continental countries, where a class of transport agency, known as the *spéditeur*, has grown up, which acts as intermediary between trader and railway company, and undertakes transport and the arrangements with the railway company on behalf of traffic senders. The *spéditeur* is a forwarding agent often in a large way of business. He collects traffic from senders, obtains a low rate from the railway company in virtue of making up 5- or 10-ton lots, and enters into contract with senders to deliver their traffic to any required destination. Many of these *spéditeurs* own not only cartage teams, but sidings, warehouses, harbours and wharves, special wagons and transport facilities on a large scale. But the holding up of traffic to get good loads results in less expeditious transport than we are used to in Great Britain, though it may be pointed out that express train conditions are always available for traders on the continent upon payment therefor.

(In France this fast service is known as *Grande vitesse*, in Germany as *Eilgnt.*)

The tendency under the new arrangement of the 1921 Act will certainly be to look upon the cartage service more and more as being a non-essential railway service. In so far as railway companies perform the service to-day they are carrying on the business of their principal competitors.

Whilst we have throughout this chapter written as though all railway companies were alike in having for their "class" rates figures quoted as C and D. rates, it should here be stated that in the case of the railways directly south of the Thames (i.e. the old S.E. & C. and the L.B. & S.C. Railways) the case was different, in that with these two companies the general quotations were on the S to S. basis, and when cartage was required by traders appropriate additions in charge were made therefor

The fact that such was the case, and that it has largely been continued since the 1923 amalgamations, should afford a useful precedent when the time comes for adjusting all cartage charges and arrangements to give effect to the same principle, as this is required by the 1921 Act.

CHAPTER XIV

THE QUESTION OF RISK

IN the description of a station rate book (Chapter I) it was pointed out that a great number of exceptional rates have attached to them, as a condition of their application, the symbols S.S., O.R., i.e. station to station, owner's risk. We have already explained the significance of the term station to station as distinguished from "C and D.," which is applicable to the traffic which normally a railway company "collects and delivers."

THE OWNER'S RISK CONDITION

We now propose to define as clearly as we can the term owner's risk, as applied to railway rate-making. It is probably the commonest of the conditions which the railway companies attach to rates quoted as exceptional rates. In practice, it is explained by a railway company, there are for most traffics two rates in operation, at either of which, at the choice of the sender, the goods may be consigned, one, the company's risk rate, when the company undertakes to bear all the ordinary liability of a railway company; the other, a reduced rate applicable to the traffic, when the sender agrees to relieve the railway company from liability for loss or damage or detention to the goods whilst in the custody of the company (except when such loss or damage is proved to be the result of wilful negligence or misconduct on the part of the railway agents).

At present and in the past there has been no sort of relationship between the two descriptions of rate. For certain classes of traffic, especially, perhaps, traffic carried by passenger train, an owner's risk rate is the normal charge, and the standard rate is so much above that in regular use that it is prohibitive and quite inapplicable

in practice, this state of affairs arising out of the fact that when a so-called "exceptional" rate has been quoted the opportunity has been taken on the railway side of shifting liability for loss or damage on to the shoulders of the sender of the goods. The great change which is to come over our rates system in this respect as from "the appointed day" is (1) that all rates must normally be based and quoted upon a company's risk footing, and (2) where owner's risk rates are quoted the difference between the two must be "such as in the opinion of the Rates Tribunal is fairly equivalent to the amount by which the risk of the company in the case of the merchandise in question differs under the two sets of conditions." (Railways Act, 1921, Sect. 46, sub sec. 3.)

THE X.Y.Z. ARRANGEMENT

Apart from the O.R. condition which is attached to the great majority of exceptional rates, there are to-day quite a number of articles recorded in the general classification as being subject to a reduced rate of 10, 15 or 20 per cent (varying according to the nature of the article) when the sender expresses himself as willing to relieve the company from liability. This is known as the "x, y, z" arrangement, because the three percentages just named are indicated respectively by one of the three letters being placed after the corresponding class number in which the particular commodity stands, thus, 5_x, 4_y, 3_z would mean that an article in Classes 5, 4 or 3 respectively was subject to a reduction of 20, 15 or 10 per cent if the sender elected to consign it at O.R.

In the first report of the Rates Advisory Committee to the Minister of Transport, the committee expressed the view that the reduction in respect of owner's risk when an exceptional rate was quoted below a class rate should be upon such a percentage basis as could be justified by the nature of the risk pertaining to the traffic, and in their second and main report (dated December, 1920) they

recommended that wherever possible the x,y,z system should be extended to indicate the percentage of reduction.

Having explained, thus, generally the alteration of practice which the 1921 Act is intended to secure, and which will take effect as from the appointed day, we may look a little farther into the general position in which a railway company stands to-day in the matter of risk as the result of past legislation and practice.

RAILWAY LIABILITY FOR LOSS OR DAMAGE

Speaking generally, a railway company becomes liable to make good any loss or damage to goods that are in its custody as a common carrier. The exceptions which are laid down in parliamentary statutes are (1) damage caused by the Act of God, (2) the King's enemies, or (3) inherent defect or vice in the animals or things carried. Valuable articles or packages and animals conveyed by rail in value over a certain figure must be insured, the company's liability being limited to articles over a fixed value. The ordinary liability of a railway company (apart from special insurance) for damage to a horse has been since the Railway and Canal Traffic Act, 1854, limited to £50, for any meat cattle to £15, for any other animal, £2. The Advisory Committee considered that under present-day conditions these figures were unduly low, and decided that they should be increased respectively to £100, £50, and £5; and these figures are recorded in the 1921 Act.

It need hardly be said that the question of inherent vice is not always easy to determine. A case once arose in regard to damage to a pig which had wandered upon the line from an adjacent field, and which had been run over by the railway company's train, the owner contending that the railway company had not maintained a proper fence, which latter was so low that the pig had jumped over it. The reply of the company's solicitor was that the fence was all right as a protection against all normal domestic beasts, including swine, and it was only because the damaged

pig was an unusually athletic pig that the fence had not been effective. The railway company gained their case owing to the inherent vice or defect (!) of the pig in question.

The general position of a railway company to-day in the matter of liability for risk to goods in its custody is not easy to understand, for the legal position is somewhat involved. A railway company commonly repudiates all liability in respect of all goods named in the Carriers Act, 1830, (the goods named in the Act include all such articles as silks, furs, clocks, jewellery, gold and silver coin, hand-made lace, glass of all kinds, precious stones, china, pictures, and paintings, title deeds, etc.) unless they are declared and insured. This means that valuable and easily damageable articles should be insured when sent by rail, and in respect of all others it may fairly be assumed that a railway company has the liability which is upon all common carriers, that is that as long as the goods are in its custody it is under obligation to take all proper and reasonable measures to see that such goods are adequately protected against theft or loss or damage of any kind.

When a sender is in the habit of dispatching goods by rail at owner's risk it is the practice of the railway company to obtain a specifically signed note or agreement from him, declaring that he absolves the railway company from all risks, except such as may be due to wilful negligence or misconduct on the part of the railway servants.

RISK NOTES AND MILK

Most of the milk conveyed daily from farms to the urban consuming centres is carried under these "risk note" conditions. A porter may in the act of conveying a milk churn by barrow across the rails upset the can and lose most of the contents, and he may be according to all common-sense opinion distinctly negligent or careless, but unless the owner of the milk *can prove wilful misconduct or negligence* he is unable to recover any damages or prove liability on the part of the railway company.

In the case of milk traffic, the C.R. rates to-day would be prohibitive against the traffic, and it remains to be seen how they will be dealt with in the revision before the Rates Tribunal.

There is provision in the Act for senders who have been in the habit of having their milk conveyed at low rates under an owner's risk scale to apply for such O.R. condition to be continued, and apparently power also to the Tribunal to grant a continuance, but such continuance would appear to be contrary to the spirit and principle of terms and conditions applying to Sect. 44 (1), which provides that the normal rates for merchandise shall be based upon company's risks conditions. It is true there is a proviso "apart from a special contract to the contrary," but it is hardly conceivable that it was contemplated that under this proviso the whole of an important traffic like milk, for example, could be excepted from the operation of the company's risk condition.

Presumably this particular commodity, milk, will have to be treated as having in the past been carried under an owner's risk condition, and therefore the O.R. rate will require to be taken as the rate to be continued, and a new company's risk rate created, whose quantum will become the standard rate and will bear a proper and reasonable relation to the O.R. rate, so that the sender may have the option of either of the two rates, the C.R. and the O.R. rate.

LIVE STOCK TRAFFIC

There is one class of traffic in respect of which it is provided in future there shall not be any new owner's risk rates established, although traffic has in the past been regularly passing at the C.R. or O.R. condition, at the choice of senders, namely, live stock, and it is interesting to note the reason for this. An attempt was made to measure the risk falling upon a railway company in the conveyance of live stock, and figures were presented to the Rates Advisory Committee showing the extent in money to which the railway companies had paid claims on this

traffic. It transpired that the amount of compensation paid by the railways in respect of loss or damage to live stock was so small in relation to the total receipts that the tribunal did not consider that any case was made out for the two classes of rate, and they therefore laid down that in regard to live stock a railway shall be under no obligation to carry at owner's risk.

The principle embodied in the Act of 1921 seems to be clearly that separate C.R. and O.R. rates shall only be agreed and quoted where it is clear that there is a substantial difference in the risk equivalent, from which the company would be relieved when the sender, or trader, agrees to take the risk. (See Sect. 46 quoted on page 140.).

RAILWAY NOT BOUND TO CARRY CERTAIN ARTICLES

There are, of course, certain articles which a railway company is not bound to carry at all, such as gunpowder, explosives, or any inflammable or dangerous goods. Wild animals would also come in a similar category. Large and unwieldy articles of machinery are another category. Generally speaking, it will be found that in practice almost any article or commodity will be carried by a railway, provided that due notice is given as to requirements. An awkward and unwieldy piece of machinery, e.g. a big boiler or an unusually large ship's stern frame, may be so broad as to require both lines of rail to be free to let it pass. Clearly under such circumstances working on a Sunday may be necessary, and special appliances may have to be requisitioned for loading or unloading the article, all at great inconvenience and high cost to the railway company. It is manifest that such circumstances as these call for special terms and conditions. A railway company is usually willing and ready to make these special arrangements, and in regard to explosives and such like goods the railway companies, instead of refusing to handle the traffic, have laid down an elaborate code of regulations under which

dangerous and explosive goods may be conveyed. These regulations to a very large extent deal with methods of packing, describing what the railways expect in these matters; and these conditions must be complied with by senders if they would have dangerous articles conveyed by rail. (Particulars as to these regulations are set out in the official General Railway Classification of Merchandise.)

FOUR CATEGORIES

From the point of view of feasibility of conveyance by rail all commodities may be divided into four categories: (1) articles which the railway companies decline to carry under any conditions; (2) articles such as those named in the Carriers Act which the company will not carry unless they are insured against loss or damage; (3) articles which are only carried at owner's risk; (4) articles which may be carried at normal rates, i.e. company's risk, (a) when packed in accordance with the company's requirements, or (b) which need no packing.

We have pointed out that it is the regular practice of the railway companies to require from senders a duly signed agreement or contract, relieving the railway from liability for loss or damage when they request their traffic to be carried at owner's risk. It is further the practice to require, in respect of all traffic forwarded by rail, a consignment note to be filled up by sender. This consignment note is provided by the railway company and takes the shape of a formal request on the part of a sender that the railway company will forward the goods to the desired destination, and of a declaration that the sender is prepared to accept the railway company's conditions of carriage, all of which it is the custom to set out on the back of the consignment note. This consignment note forms the normal contract for carriage of goods.

THE CONTRACT OF CARRIAGE

The new Act, however, specifically lays down that for all normal or standard rates, the standard conditions which

include the acceptance by the railway company of the ordinary risks of conveyance *no special contract in writing shall be required.*

It may be anticipated that when the new system of rates comes into operation, that is after "the appointed day," there will be separate and specific consignment notes for each of the following descriptions of traffic—

1. Traffic conveyed at standard rates at company's risk.
2. Traffic conveyed at owner's risk.
3. Damageable goods not properly protected by packing.
4. Dangerous goods conveyed only on special terms and conditions.

A question may be raised as to whether any signed document in regard to traffic conveyed under normal conditions at company's risk will be necessary, in view of the words of the Act that no contract shall be required, though, of course, it is essential that clearly defined information as to the character and weight of traffic and its destination must be provided in a duly prescribed manner.

THE O.R. OR PERISHABLE TRAFFIC SCALE

One of the most striking examples to-day of a scale of tariff charge on the owner's risk basis without any corresponding company's risk scale is probably what is known as the scale for perishable traffic by passenger train at owner's risk. For all except light weights at short distances, the owner's risk or "perishable traffic" scale—it is often known by the former short title—is practically half the ordinary parcels scale charge. Indeed, the charge seems to have grown up under the following rule of thumb method—

When a regular traffic in specific articles travelling considerable distances became constant, such as pork pies and sausages from Melton Mowbray or Sheffield to Newcastle-on-Tyne or London, it was felt that the ordinary parcels charge was prohibitive. At the same time, the traffic, being a regular one, produced a good revenue and was well worthy of cultivation by lower rates. It was a traffic needing quick

transit because of its perishable nature, and the ready expedient of granting half rates, at first agreed to for a few descriptions of regular traffic of the character referred to, soon became established as a regular charge, known for a long-time as "half parcels," for a great variety of traffics conveyed by passenger train for which the normal parcel rates were considered too high. As so much of this traffic needing a quick service was of a perishable nature, the opportunity was taken when the reduced rates were quoted of prescribing the O.R. condition, and some years ago now, this particular tariff became known as the "owner's risk scale" for parcels traffic, and was established at Clearing House by the railway companies as a whole as an alternative to the general parcels scale at the normal rates; and it has for many years been quoted for all kinds of traffic for which the justification of considerable quantity could be alleged for a low rate, and for each specific traffic appropriate conditions as to collection or delivery, or collection *and* delivery, and as to minimum quantity were also prescribed. The companies generally from year to year confirm the list of commodities which may be carried under this reduced owner's risk scale, and it is constantly being added to. But for most, if not all, of the articles in this list of commodities there is no company's risk rate available at any practicable or reasonable figure, and it would seem that the determination of such a C.R. rate for the important class of traffic included in this list is one of the many matters upon which the Tribunal will have to come to some decision on an early date. A good many modifications have also been made in the quantum of the rates charged, especially as regards the shorter distances.

It is a great step forward towards a more regular system to have established the condition of company's risk as a standard level for all normal rates.

CHAPTER XV

THE REVOLUTIONARY ACT OF 1921

To justify the epithet which it has been thought well to give to the 1921 Act in the heading of this chapter, we cannot do better than begin with a summary of the principal new features which are embodied in it.

THE RATE-MAKING FUNCTION

Apart from the amalgamations which it authorized and required should be accomplished, and which were all carried out and date as from 1st January, 1923, for, perhaps, by many they are regarded as the most conspicuous provisos of the statute, the Act, by establishing a Railway Rates Tribunal charged with the duty of evolving a new system of rates and charges, and the determination year by year of what are reasonable and impartial rates for commodities and fares for passengers by rail, takes out of the hands of the railway companies the main responsibility for the rate-making function, and vests it in a Government tribunal representing the commonwealth at large, an important stage in the direction of democratization of the railways.

CONDITIONS OF EMPLOYMENT ON THE RAILWAYS

In the second place, it takes out of the hands of the railway companies the settlement of all questions of wages, hours and conditions of service of the men in all grades, and requires the establishment of joint councils representing the men in all the principal grades, including clerks in the management offices, these councils being vested with the power of discussion and, as far as practicable, settlement. The Act specifically recognizes the railway trades unions, viz., the National Union of Railwaymen, the Amalgamated Society of Locomotive Engineers and Firemen, and the

Railway Clerks' Association, as parties to any such councils within the railway service ; and it establishes an appeal court or tribunal (the National Wages Board), composed of (1) the managers, (2) of representatives of the railwaymen (elected through their trades unions), and (3) of the users of the railways. When it is recalled that almost up to the time of outbreak of war, some of the railway boards of directors adhered to a policy of refusal to recognize, or have any dealings with, the men's unions, the far-reaching character of the new legislation in this matter will be appreciated.

THE STANDARD NET REVENUE

But a third factor of possibly greater import than the two just named calls for prominent mention, namely, the setting up of a standard net revenue which the companies should aim at earning out of the revenue received by them from charges made to their customers. This comes very near to the principle of a limitation of shareholders' dividends, and will have the effect of taking away from the administration any incentive to the earning of high dividends as a main objective in management. The standard revenue, which it is laid down in the Act is to be considered as a fair return on the capital for the railway companies to earn, is to be the actual amount of net revenue which accrued in 1913, subject to various adjustments to meet capital which had been spent since that date, or which at the date of the Act had not had time to fructify. The net revenue of 1913 was, roughly speaking, £44,000,000, and the "standard revenue" of the future, after various adjustments have been given effect to, has since been fixed by the Rates Tribunal at £45,218,523. This represents a percentage of 3.8 on all the railway capital of the country expended, the total capital figure of expenditure being £1,190,575,000.¹

¹ Ministry of Transport Returns, 1924: Capital subscribed, £1,133,649,855 ; capital expended, £1,100,574,780.

PERIODICAL REVIEW OF RATES AND REVENUE

The Tribunal are required annually, or at such other periods as they may determine, to make a careful review of the rates charged and the revenue derived therefrom, and when any surplus above the standard revenue is yielded, the balance in excess is to be returned, as regards 80 per cent of the amount, to the railway users, i.e. the public, in the shape of reduced charges for the following year. When there is a shortage of net revenue and the standard amount is not earned in the railway receipts, the Tribunal must take the rates figures into consideration and make such modification, if considered necessary, in an upward direction as in their opinion will again enable the railway companies to realize their standard revenue. :

A word or two further seems here to be necessary on this question of standard revenue, which the Act specifically describes as net revenue. The charges to be fixed by the Tribunal are to be "such as will so far as practicable yield—with efficient and economical working and management—an annual net revenue." Although the standard revenue is not in express terms guaranteed, it is clearly the intention of the Act to recognize the principle that the rates fixed upon every class of traffic which is conveyed upon the railway system should be framed on such a basis that beyond covering the working "out-of-pocket" expenditure, they should each contribute some quota, by way of surplus, towards the standard revenue which becomes the sum available for appropriation as interest return upon the capital charges. What this quota is for the different classes of traffic can only be determined by carefully compiled statistics of costs, and every exceptional rate should in future be tested by a cost-of-working criterion as well as by what the traffic to which it is to be applied can bear. Only so can we be clear that traffics are not to be carried at rates which may be actually under the cost of working level, and so jeopardise the maintenance of the standard revenue.

From what has been said it will be seen in what an unprecedented manner the new Act is destined to affect : (1) the shareholders ; (2) the administration ; (3) the railway personnel of all grades , and (4) the traders and passengers who make use of the railway.

We are here, however, only concerned with the rates and charges provisions of the Act, and we may proceed to summarize the main alterations of principle or method in the rates system which the Act gives effect to.

FUNCTIONS OF THE RATES TRIBUNAL

These alterations centre round the establishment of the Rates Tribunal, whose functions have been described in the chapter, " The Coming of the Tribunal." This tribunal is charged with full power to fix and determine the rates and charges of the future, both as regards passengers and merchandise. It must, however, fix them on a reasonable basis, and it must refuse any rates or charges that would grant an undue preference to any one person (or groups of persons) or place over another.

Within these general principles of impartiality and reasonableness, the Tribunal will practically have full power to determine rates and charges. They must determine all questions as to alterations of classification, the alteration of any existing rates or the settlement of new ones ; the reasonableness of all conditions applicable to the conveyance of goods, including the relationship between company's risk and owner's risk ; the amount or proportion of rate to be charged for terminals and conveyance respectively, and any question of rebate attaching to a private siding rate ; what are dangerous goods, and what classes of goods a railway company may reasonably refuse to carry.

When we consider the degree in which the whole commerce and industry of the country is dependent upon the maintenance of adequate transport arrangements provided on a reasonable basis of cost, we may realize the responsible nature of the Tribunal's function and authority.

ACTUAL, NOT MAXIMUM, RATES

It should be pointed out that the charges which the Tribunal has to arrange are standard charges, and so remain until they are again altered under the Tribunal's authority, in contradistinction to all previous charges settled by Parliament in times gone by, which have been *maximum* charges. It is a common misapprehension that in the past Parliament has been in the habit of fixing the charges which a railway company may make, but this was by no means so. It has been explained that what Parliament has done has been to fix definite figures as a limit to the upward charge which any railway may make, and this in respect of every commodity and every distance. But these were maximum charges, and the railway companies fixed all their own actual rates, subject to observance of the parliamentary maximum figures, or "maxima," as they were commonly called. But the whole system of "maximum charges" has been swept away, and now, instead of parliamentary limits restricting the rates on every commodity, the *actual rates* will be fixed by the Tribunal, and the railways will only suggest alterations and apply for the necessary sanctions. They will always be liable to have to convince the Tribunal that any new scale or tariff, or class, or exceptional rate, is right and reasonable.

As soon as "the appointed day" is fixed, when the new rates arrangements will take effect as standard charges, then the initial work of the Rates Tribunal, that is the work of *establishing* a new system and basis for railway rates, will be over. After that the principal work of the Tribunal will be to see year by year whether the rates are on an appropriate level to yield the necessary revenue. The rates and charges must be fixed at such a level as will, in the opinion of the Tribunal, yield this revenue.

FUTURE OF EXCEPTIONAL RATES

But probably the most difficult nut the Tribunal will have to crack will be that of unravelling and straightening out

the problem of exceptional rates. We give in the following paragraphs a summary of the provisions of the Act in regard to exceptional rates, and this recapitulation should be read in the light of what has been said in Chapter XII as to the importance of eliminating these and of "tariffizing" or standardizing them wherever practicable.

As from "the appointed day" all exceptional rates, except such as have either been agreed to be continued by the railway company and the trader, or whose continuance has been requested by letter from the trader to the company concerned, will cease to operate. In the latter case the Tribunal will decide as to continuance. All rates that are less than 5 per cent below standard, and all rates that have not been used for traffic for two years, will automatically be discontinued. If any rate more than 40 per cent below the new standard rates is agreed for continuance as between trader and railway company, such agreement must have the definite approval of the Tribunal before it can be operative.

Under the arrangements as above set out it is clear a large number of exceptional rates will still be continued, though such as are less than 5 per cent below standard rates or more than 40 per cent ought, apart from any special circumstances (to be sanctioned if necessary by the Tribunal), to disappear absolutely.

FIXATION OF NEW EXCEPTIONAL RATES

The establishment of new rates is subject to a somewhat different procedure, and in this matter both the Tribunal and the Ministry of Transport take a share. No new exceptional rate may be agreed to less than 5 or more than 40 per cent below standard without the sanction of the Tribunal, and within these limits the Ministry of Transport must first determine whether the exceptional rate proposed is fair and reasonable, having regard to its effect on (1) the standard revenue or (2) other existing rates.

The procedure laid down is that all such exceptional rates proposed within the limits named must be reported

to the Ministry before becoming operative, and if the Ministry is not satisfied they must refer the question to the Tribunal for settlement. The Tribunal may then cancel, modify, or revise, any or all of the exceptional rates concerned.

The abolition of all exceptional rates would have caused so serious a disturbance of existing arrangements that we can hardly be surprised that Parliament in the state of industry in the years 1920 and 1921 refrained from prescribing any such absolute abolition, which might have seemed a natural course to adopt ; but it seems fairly clear that there was a general determination that the extent to which exceptional rates had grown should be largely curtailed, and that the new tribunal, working in harmony with the Ministry of Transport, have wide powers to modify, if not abolish, the system of quoting exceptional rates almost haphazard, which has grown up and established itself.

The very definitely expressed view of the Rates Advisory Committee as to the absolute necessity of the complete revision of the system and of the abolition of exceptional rates noted and quoted as the result of coastwise sea competition (see Chapter V), cannot in the future very well be ignored by the Tribunal in determining the lines of future tariffs or rates, and it is to be hoped that the bulk of what are now "exceptional" arrangements will in the near future, under the careful and wise piloting of the Tribunal, be brought by some system of grouping or tariffization into a more definitely impartial and scientific system than has been in operation during the past half century.

NEED OF NATIONAL TRANSPORT POLICY

In Chapter X, which deals directly with the functions of the Rates Tribunal, the absence from the 1921 Act of any declaration of policy beyond what is contained in the Section (58, sub sec. 2), which enjoins upon the Tribunal that they must have regard to the means best calculated to

extend and develop traffic, has been referred to. We may here suitably emphasize the importance of having a policy, and a strenuous transport policy, before the country, in order that the national commerce and industry may be developed to its fullest extent. Such development can never be secured or encouraged if the idea becomes established that a standard revenue is to be maintained by high charges. The whole basis of exceptional rates is that reductions below standard will best develop traffic and increase revenue. Passenger traffic in recent years has been encouraged and passenger revenue increased by cheap fares judiciously quoted, not by an increase of charges. This is so essential and basic a principle, whose soundness the study of past history confirms, that it seems desirable that it should be emphasized just now in view of the proceedings pending before the Tribunal, wherein it is so constantly assumed that the way to make up for any revenue deficit upon the standard is to increase charges all round.

The question of a railway national policy is of great importance. One of the difficulties of assessing the efficiency of railway administration in the past has been that we have no rational or intelligible policy laid down. From the nature of things this has been inevitable, for the railway system has been, and still is, run as an individual or private enterprise, or rather now as a collection of such private enterprises, and the unwritten understanding in regard to such an enterprise is that it must be run on business principles; in other words, with the object of yielding good dividends to the shareholders, whose money is held in trust. But from time to time statements have been made by railway chairmen at their half-yearly meeting speeches that they regard the administration of the railway system also *as a trust*, and that capital, and revenue also, must of necessity be spent at times in the development of the districts which they serve, even though a direct pecuniary return is not calculable or traceable. So the policy

may vary between these two widely diverse ends of earning a large dividend for a specific company and that of developing the district. The district now served by the railway companies must be regarded as the country as a whole, and now that a new era is bringing with it a new railway régime, the need of a national policy for the railways must be placed at the very forefront of the industrial requirements of to-day.

The fact that a Ministry of Transport has become established amongst our institutions ought to lessen any difficulty in the way of a declaration of policy. If the Government do not on an early day give us such a declaration of policy, the railway executives themselves, acting in unison, could do so. If such statement of policy does not emerge from either Government or railway executive, then there is still the Rates Tribunal who will have opportunity to tell us their policy as regards the fixation of rates when they come, in the future, to give effect to their annual revisions. Such indications of policy are, from time to time, expressed in the annual reports of the Inter-State Commerce Commission in the United States of America.

France, Italy, Switzerland, Japan, and many other countries, have also made declarations of far-reaching policy proposals.

For, indeed, the question of policy is inevitably bound up with the determination of the quantum of rates and charges fixed to produce a standard revenue; and as we have so earnestly stressed this question of policy it is, perhaps, only fair, in view of its importance, that we should elaborate the position as it seems to be presented in the circumstances of to-day.

REVIEW OF THE PRESENT RAILWAY POSITION

1. In view of increasing competition with foreign countries in the production of all transportable commodities, it is essential that our railways at home should be administered as one transport system, for the good of

the commonwealth and for the development of an ever-growing amount of traffic.

2. On a judiciously arranged basis of rates and charges there is still scope, in spite of all threatened competition by road, sea and air, for a continuous growth of traffic for many years to come, there is great opportunity for further development of long distance traffic by wise reductions in charge, whilst such growth can never be encouraged by a policy of high charges, or on any all-round increase of present figures.

3. Only by a continuous and large increase in traffic can the railway companies regain their net revenue so as to secure the standard amount which has been now determined

Whilst at all hazards a steady and continuous development of railway traffic must be secured so as to yield an increase in gross revenue receipts, the possible scope for economies in expenditure is such that the quantum level of gross expenditure now reached ought not to be increased, to any serious extent at least, even with increasing traffic, for many years to come.

RAILWAY POLICY RECALLED

May we, before concluding, fall back on history, and refer to one bold stroke of policy rather more than fifty years ago, when Sir James Allport embarked upon the great venture of a penny a mile as the third-class fare over the Midland Railway system, a stroke of railway policy which has perhaps never been surpassed in its beneficent results. But the pessimists and croakers of that day vociferously protested that he was leading the railways in the path of ruin.

We are again at the turning of the ways and if, in this last chapter, we digress somewhat into the bypath of suggestion, it is because of a belief that to-day it is a bold policy of venture along new paths, the result of an enlightened vision, rather than the over-cautious policy of safeguarding by careful *evidence of what has been* that is needed

and alone can now lead the railways forward to a successful future career.

Learned counsel, speaking for the railway companies before the Rates Tribunal, did not fail indeed to point out how under present-day developments a new departure has been inaugurated, which requires the consideration of new principles and new machinery, and that, as the Advisory Committee had pointed out, "it is of primary importance to take note that a totally different aspect is placed upon the problem of fixing rates" under an arrangement by which an independent authority is commissioned to secure the railway companies a specified amount of revenue. Curiously enough, however, this view was propounded side by side with a very much stressed contention that the principles (?) of the existing system of exceptional rates, in view of the long period of past experiences out of which they had been evolved, should be maintained *with as little disturbance as possible*.

What, we are tempted to ask, had a long experience in the past to do with Allport's bold experiment of universal penny-a-mile fares for third-class passengers? What has past experience to do with the replacing of steam by electric traction?

DEMAND FOR A BOLD PROGRESSIVE POLICY

It is a bold policy that is needed now to resuscitate railway progress. The questions that are in the mind of the public to-day in regard to railway policy are such as the following—

How is passenger travel by our railways, which has for some fifteen or sixteen or more years now become practically stationary, going to be again stimulated into progressive movement?

How soon will the railways of Great Britain embark practically upon such an extension of electrification as was foreshadowed soon after the conclusion of war, and such as so many other countries are vigorously pursuing?

Has not the time come when the long distance traffic in Great Britain, both passenger and goods, may be extensively developed by a large reduction of conveyance charges ?

May not the policy of railway amalgamations, which the 1921 Act embodied, be carried still farther by the unification and consolidation of the railway systems under one direction, and thus, through the supersession of the method of useless competition by national co-operation, realize the anticipated economies and advantages which as yet do not seem to have emerged by the compromise arrangement of 1921 ?

Is it not possible to systematize our rates and charges arrangements under some more equitable and intelligible arrangement than a system of exceptional rates can ever admit of ?

All these questions, and there are many more, though these set out the more important ones, have a very direct bearing on the question of the evolution of any system of rate-making which is best calculated in the future to produce the standard revenue required.

It is by the study and satisfactory determination of questions such as these alone, the author believes, that any true settlement can be found, and upon which real progress for our railway systems must depend.

CO-OPERATION, THE ROOT PRINCIPLE

From what direction may we hope for the propounding of a new policy which will give guidance on these things ? Who is going to give us any lead along the new path in rate-making, which the British railways need to find to-day, and towards which the new Railways Act of 1921 (which we have ventured to call revolutionary) has opened so wide a door ?

We would repeat, finally, that behind all progress must be the great economic principle of co-operation towards progressive development in a great industrial policy.

The root principle of the Act is to be found in the substitution of co-operation or combination in place of competition as the prime factor of successful administration. The Industrial Councils, inaugurated under the Act, usher in a new measure of co-operation of far-reaching extent between all grades of personnel, encouraging a team spirit which, inuring to the common good of all ranks, promises to result in more economical working immeasurable in its character. And, perhaps, above all, the active co-operation of the four managers of the large group companies working together in much closer association than heretofore with their clients, the railway users, under a common understanding that ultimately, if not always immediately, their true interests commercially are one and the same, should lead to the evolution of a new system of rates and charges on such a just and generous and intelligible basis as will have a stimulating effect on the nation's trade with progressively improving results in the practical growth of the country's wealth.

INDEX

- ACCOMMODATION in goods stations, 67-69
 Actual, not maximum rates, 152
 Acworth, Sir W., 44, 64, 78, 92
 Administration affected by 1921 Act, 151
 ——— of railways, a trust, 155
 Advantage of geographical position, 53-61
 Advantages of scales or tariffs, 127
 Alabama, Mid. R. R. (U.S.A.) case, 114
 Allocation of goods and passenger costs, 83-86
 Allport, Sir J., and third class passengers, 157, 158
 Alterations under the 1921 Act, 17, 18
 ——— already determined, 104
 Amalgamated Society of Loco. Engineers and Firemen, 148
 Amalgamation proposed between L. & N.W. and L. & Y. Rlys., 98
 Amalgamations under the 1921 Act, 42, 49
 American railways do no cartage, 137
 ——— views quoted, 6, 24, 36, 52, 55, 58, 64, 79, 83, 121, 126, 128
 Appointed day, the, 28, 33, 101, 134-5, 151-2
 Ascertainment of costs, 82
 Authority, parliamentary, to charge, 1
 ——— to make new rates, 17
 Aviation, effect of, 56
 "BASING POINT" system in U.S.A., 114
 Basis of rates, 9, 10
 Birmingham and Midlands position *re* exceptional rates, 47
 ——— cartage staff, 129
 ——— motor cartage at, 135
 "Blanket" scale for milk rates, 58
 "Blanket" scales, 31, 34-6, 58
 ——— in U.S.A., 36, 58
 ——— system of charge, 35, 58, 60
 B. of T. Inspector's report *re* Germany, 37
 Bogey of monopoly, 96
 B.R. and P.R.R. Co., statistics from, 85
 Bulk in comparison to weight— a factor in classification, 25, 27
 Butter, world-wide competition in, 60
 ———, Siberia to Manchester, 60
 "C AND D." explained, 12, 139
 C and D. rates, 12, 13
 Capital expenditure and receipts, 1911 Act, 76
 Cardwell's (Lord) clause in 1853 Act, 88
 Carriage, contract of, 145
 Carriages, scale charge for, 34
 Carriers' Act, articles named in, 145
 Cartage charges in rate-book, 133, 134
 ——— to be separately quoted, 18
 ——— not a railway function, 130
 ——— rebates, 132, 134, 135
 ——— Southern Railway practice, 138
 ——— staff, railway, 129
 ——— supervision, 136
 ——— under 1921 Act, 133
 Carted traffic, handling of, 132
 Changes under the 1921 Act, 17, 18, 104
 Charges not solely on cost basis, 77, 78
 Charlaw and Sacriston case against N.E.R., 80
 Chattanooga case, U.S.A., 110
 Churchill, Viscount, quoted, 90
 Class 21 (new classification) referred to, 28

- Classes, eight, 14, 26
 —, twenty-one, 18, 26, 33
 Classification, 19-30, 40, 145
 —, American practice, 24
 —, C and D traffic, 131
 —, specimen page, 22, 23
 —, the new, 26, 27, 29, 33
 —, uniformity of, 20, 41
 Coastwise competition, 42, 45, 46, 154
 Combing of the Rates Tribunal, 98-108
 Commission, Railway, 1873, 6, 21
 — —, Pickford case, 134, 135
 — —, Pidcock *v* M S & L.R., 69-71
 — —, Southampton case, 48, 49
 Committee, parliamentary, 1881-2, 21, 44, 52
 —, Select, 1872, 21
 Collection and delivery service, 12, 64, 129-138
 Company's risk rates, 13, 18
 Competition a regulating factor, 41-43
 — as a method, 2, 3
 — between railways, 2, 4, 41-43
 — by water, general influence, 50, 51
 — coastwise, 42, 45, 46, 154
 — in conveyance of sugar, 43-45, 54
 — or co-operation, 87-97
 Conditions of service under 1921 Act, 148
 —, general, attached to rate-books, 17
 Continuous growth of traffic possible, 157
 Contract of carriage, 145
 "Conveyance" of merchandise, defined, 65
 — and Terminals, 62
 Co-operation, a root principle, 159
 — of managers, 160
 — or competition, 87-97
 Corpses, scale charge for, 35
 Cost, knowledge of, important, 79
 Cost of conveyance, 3
 Cost of handling, a factor in classification, 25, 27
 — — service a factor in rate-making, 75-86
 — — terminal facilities, 64-66
 Costs, joint, 77
 Councils, joint industrial, under 1921 Act, 148, 160
 Cumulative scale, 1891-2 Acts, 33
 DAMAGEABILITY, a factor in classification, 25, 27
 Damageable goods, 146
 Dangerous goods, 146
 Demand for a bold, progressive policy, 138
 Depreciation, expenditure heading, 75
 Development of railway cartage, 130
 Development in the past, 40, 41
 Diagram of goods station terminal accommodation, 73
 Disadvantage of distance, eliminating, 54-6, 61
 Discrimination, 6, 10, 107, 112, 122, 125
 Duty of the Rates Tribunal, 101
 EARLIER days of railways, 20, 87, 91, 130, 131
 Early classifications, 20
 Economies in expenditure, 157
 Effect of railway competition, 91
 — — terminal charge on rates, 72
 Elasticity in arrangements—
 England compared with Germany, 10
 Elkins legislation in U.S.A., 1903, 116
 Emulation or competition, Sir O. Lodge quoted, 95
 E.o.h.p., meaning of, 26
 Equal mileage principle, 2
 — — — under early Acts, 53
 — — scales, 31, 34, 127
 Exceptional rates system, 2, 3, 5, 12, 32, 36, 40-52, 82, 92, 125, 153, 154

- Exceptional rates system, Advisory Committee's view, 46, 47, 50, 51
- — — — — extension of, 47
- — — — —, terminals and conveyance, 74
- Expenditure, economics in, 157
- , railway, heads of, 76
- FACILITIES prescribed by parliament, 6
- Factors affecting classification, 25
- Fish rates from Scotland to London, 54, 59
- Fixation of rates, 4, 5, 153
- Foreign competition, 156
- France referred to, 156
- Functions of goods manager in rate-making, 4, 5, 24
- — — — — Railway Commissioners, 67
- — — — — Rates Tribunal, 100, 153-6
- Future of exceptional rates, 153
- GEDDES, Sir, E., quoted, 80
- General charges, expenditure in, 76
- — — — — conditions attached to rate books, 17
- — — — — influence of water competition, 51, 52
- — — — — railway classification, 19, 131
- — — — —, specimen page, 22, 23
- Geographical disadvantage, tendency to neutralise, 54-6
- — — — — position, advantage of, 53
- German railways do no cartage, 137
- Germany, rate tariffs in, 10, 37
- — — — —, terminal charges in, 72
- Gladstone quoted, *re* competition, 88, 90
- — — — —, *re* justice, 124
- Goods manager's discretion, 10, 58, 62
- — — — — function in rate-making, 4, 5, 24
- Goods station building, 67
- — — — — terminal accommodation diagram, 73
- G R C., 19, 131
- Great Western Railway Act, 1835, 20, 31
- Greenock sugar case, 43, 44, 54
- Growing power of railways, 88
- — — — — world wide competition, 93, 94
- Growth of traffic possible, 157
- — — — — in cost of terminals, 66
- HANDLING of carted traffic, 132
- Heads of railway expenditure, 76
- Hepburn Act, U S A., 1906, 107, 117, 119
- Holland, parcels with, 56
- Horses, scale charge for, 34
- Hours and wages under 1921 Act, 148
- Hull, position *re* exceptional rates, 47
- Hungary, zone scale in, 35
- IMPARTIALITY of treatment, 2, 6, 9
- Importance of present juncture, 124
- Influence of public opinion in U S A., 115
- Interest charges, 76, 77
- Inter-State Commerce Act, 1887, 107, 108, 110, 112, 113
- — — — — Commission, 24, 55, 58, 70, 83, 106, 107, 110, 123, 126, 128, 156
- — — — — Costs statements quoted, 86
- Irregularities in U S A. rate-making, 111, 112, 118
- Italy referred to, 156
- JAPAN referred to, 156
- Joint costs, 77, 83
- — — — — Councils under 1921 Act, 148
- Justice a principle in rate-making, 124-8
- L and N W and Mid amalgamation proposal, 1853, 88

- Legislation of 1910, U.S.A., 118
 Letters, scale of charges, 34
 Limitation of dividends, 149
 Liverpool and Manchester Act,
 1826, 19, 21
 — to London rates, 45, 46, 91
 Live stock traffic, 143, 144
 Locomotive Engineers and Fire-
 men and 1921 Act, 148
 Lodge, Sir, O quoted *re* "emu-
 lation," 95
 London cartage staff, 129
 —, motor cartage in, 135
 Long and short haul clause in
 U.S.A., 112, 114, 116, 118

 MAINTENANCE and renewal ex-
 penditure, 76
 Manchester, motor cartage at,
 135
 Maximum rates in early days, 62
 — — —, parliamentary, 2, 32,
 34, 40, 65, 66,
 152
 — — — terminal charges, 63, 65,
 67
 Method of packing, a factor in
 classification, 25
 Methods in rate-making, 4, 15,
 16, 49
 Milk, conditions of carriage, 143
 —, blanket scale in U.S.A.,
 58
 —, scale of charges for, 35,
 59, 102, 103, 128
 Ministry of Transport and new
 rates, 153
 — — — and national
 policy, 154-6
 — — — returns, 136
 Monopoly, fear of, 99
 — power of railway com-
 panies, 89
 —, the bogey of, 96
 Motor delivery wagons, 135,
 136
 — haulage, 135

 NATIONAL transport policy,
 need of, 154-6
 — Union of Railwaymen and
 1921 Act, 148
 — Wages Board, 149
 Need of national transport
 policy, 154-6
 Net revenue of railways, 149

 Newcastle, position *re* excep-
 tional rates, 47
 New classification, 26, 27-9, 33
 New rate-books required under
 1921 Act, 18
 New rates, quoting and re-
 cording of, 15, 16
 Normal cost items, 76
 North Eastern Railway, amal-
 gamation, 1854, 87, 96

 "ON-COSTS," 82
 Ordinary scale for parcels, 35, 38
 O.R., explained, 12, 139
 O.R. scale for parcels, 146
 Out of pocket costs, 80, 81
 Oxnoid's risk rates and con-
 ditions, 13,
 18, 139-41
 — — —, Rates Advisory
 Committee's
 view, 50

 PACIFIC Coast, rates to, 55
 Packing, method of, a factor in
 classification, 25
 Panama canal, opening of, 120
 Parallels from U.S.A., 6, 24,
 36, 52, 55
 Parcels post charges, 35, 57
 Parcels scale, 35, 38, 128
 Parcels scale, N.E.R. and Hol-
 land, 56
 Parliamentary authority to
 charge, 1, 2
 — Committee, 1881-2, 21, 44,
 52
 — control, beginnings of, 40
 — maxima, 1, 2, 32, 34, 40,
 65, 66, 152
 Passenger fares scale, 34
 Passengers and traders affected
 by 1921 Act, 151
 Pennsylvania R.R., president
 quoted, 64
 — — —, table from 1924 Re-
 port, 83, 84
 Penny postage, reversion to
 promised, 58
 — — — scale of charge, 34,
 35, 57, 127
 Periodical review of rates, 150
 Perishable traffic, O.R. scale of
 rates, 146
 Permanent way expenditure, 76
 Piano case, (terminals) 63, 64, 72

- Pickford *v.* L. & N.W.R., 134
 Pidcock case, 69, 70
 Policy, need of, 154-7
 Port rates, 45-9
 Post Office scale of charges,
 34-5, 57, 127
 Preference, undue, prohibited, 6, 7
 Principles in rate-making, 2, 5,
 6, 41, 126
 Prouty, chairman of I.C.C.
 quoted, 121
 Provisions and dead meat from
 the ports, 45, 46
 Publicity, importance of, 6, 9
- QUANTITY conditions, 13, 28, 36
 ———, Advisory Com-
 mittee's view, 50
 Question of risk, 139-147
 Quotation of rates, 16
- "RAILROADS Rates and Reg-
 ulations" (Ripley) referred to,
 24, 115, 117
- Railway Acts, 1891-2, 2, 7,
 31-34, 63, 65
 ——— amalgamations under 1921
 Act, 42, 159
 ——— and Canal Traffic Act,
 1854, 6, 141
 ——— and Canal Traffic Act,
 1888, 2, 3, 7, 20, 21,
 62, 69, 99
 ——— and Canal Traffic Act,
 1913, 80
 ——— cartage staffs, 129
 ——— Clearing House, 19, 21, 147
 ——— Clerks' Association and
 1921 Act, 149
 ——— Commission, 6, 21, 66,
 70, 80, 98, 99, 134, 135
 ——— Companies' Accounts and
 Returns Act, 1911, 76
 ——— Companies' Accounts and
 Returns Committee's
 report, 90, 91
 Railway policy, need of, 154-7
 ——— recalled, 157
 Railway rates, basis of, 9, 10
 Railways Act, 1844, 88
 ———, 1921, 7, 17, 26, 27,
 32, 42, 49, 50, 71,
 72, 76, 81, 84, 89,
 90, 97, 101, 104-6,
 130, 132, 133, 138,
 141, 144-6, 159
- Railways and geographical posi-
 tion, 53, 54
 ——— not bound to carry certain
 articles, 144
 ——— of U.S.A., costs state-
 ment from I.C.C., 86
 ——— Regulation of, Act, 1873,
 6, 8, 21, 60
 ——— ———, 1894,
 Rate book at stations, 3, 5, 8,
 18, 22
 ———, cartage charges, 133,
 134
 ———, conditions attached
 to, 17
 ———, distribution of, 14,
 15
 ——— sample page, 10
 Rate-making function, 148
 ——— methods of, 4, 49
 ——— principles, 2, 5, 6,
 41, 126
 ——— progress in America,
 109-123
 ——— cost of service a
 factor in, 75-80
- Rates Advisory Committee, 9,
 20, 28, 33, 36, 42, 46,
 47, 50, 104, 125, 141,
 143, 154, 158
 ——— and taxes expenditure, 76
 ———, exceptional, Advisory
 Committee's view, 46-51
 ———, 2, 3, 5, 12, 32, 36,
 40-52
 ———, terminals and con-
 veyance, 8, 14,
 74
 ——— on fish, Scotland to Lon-
 don, 54
- Rates Tribunal, 32, 50, 70, 74,
 100, 122-6, 128,
 143, 147, 150-56,
 158
 ———, the coming of the,
 98-108
- Rates, quoting of, 15, 16
 ———, recording of, 15, 16
 Rate tariffs in Germany, 11
 Rebates on carted traffic, 132,
 134, 135
 ——— or secret allowances pro-
 hibited, 7
- Recognition of railway unions,
 1921 Act, 149
- Recording of rates, 15, 16

- Renewals expenditure, 70
 Restoration of power to I.C.C., 116
 Returned empties, classification of, 28
 Revenue, standard, 76
 Reversal of parliamentary policy *re* combinations, 89
 Review of present railway position, 156
 Revolutionary Act of 1921, 148-160
 Ripley, Prof., referred to or quoted, 24, 79, 115, 116
 Risk, conditions of, 36
 — of damage, a factor in classification, 25, 27
 —, the question of, 139-147
 Road haulage brings new problems, 136
 Rolling stock, classification of, 28
 Roosevelt's railway policy, 1904-6, 107, 116, 117

 SAMPLE page of new classification, 29
 Saving in cost on large quantities, a factor in classification, 27
 Scale, equal mileage, 31
 — of charges regardless of distance, 31, 34-6, 56, 127
 —, ordinary parcels, 38
 —, tapering, 2, 31, 33, 127
 Scales and tariffs, 31-38
 — are adaptable, 128
 — departed from, 32
 — zone, 31, 35, 127
 Schedule of rates and charges of 1888, 62
 — of terminals, 63
 Science of transport, 53, 55
 Scotland, rates to and from England, 49
 Scotland to London fish rates, 54, 59
 Sea (coastwise competition), 42, 46-7, 51-2
 Secret rebates or allowances prohibited, 7
 Service terminals, 63, 65-9
 —, definition of, 65
 Shareholders affected by 1921 Act, 151
 Simplicity in rates, importance of, 102
 Simplification, 26
 Size or bulk in relation to weight, a factor in classification, 25, 27
 Smalls scale, 29
 Southampton rates case, 48, 49
 Southern Railway and cartage, 138
 Special classifications, rolling stock, timber, etc., 28
 Specimen page from classification, 22, 3
 Speditours in Germany, etc., 137
 Standard net revenue, 77, 105, 149, 150, 157
 Station rate-book, 3, 5, 8-18, 22
 — terminal definition of, 65
 — yard accommodation, 68
 Stephens, Cleveland, quoted *re* competition, 91
 "S. to S." explained, 12, 159
 Statistical tables from U.S.A., 83-6
 Stephenson's (Robert) maxim, 43
 Stockton and Darlington Act, quoted, 1, 19, 31
 Study of America advantageous, 109
 Success of the I.C.C. in America detailed, 121
 Sugar rates to Midland towns, 43, 54, 91
 Summaries—
 as to cost of service, 81
 general position restated, 124
 of chapter I, 7
 of task of Rates Tribunal, 101, 102
 Supervision over cartage, 136
 Supreme Court of Judicature, U.S.A., 107, 114-8
 Switzerland, referred to, 156

 TAPERING scale, 2, 31, 33, 127
 Tariffs in Germany, 10, 37
 — or scales, 32, 36, 37
 Tendency to neutralize geographical disadvantage, 54-56
 Terminal accommodation, 67-9
 —, diagram, 73
 — charge, effect on rates, 72
 — facilities, cost of, 64, 65
 — services, 69

- Terminal services prior to 1892, 66
 Terminals controversy, 62-74
 — definition of, 65
 — in U.S.A., 64 65
 — on piano, 63, 64
 — schedule of, 63
 — v. conveyance, 62
 Third class fares, Sir J. Allport's venture, 157
 Through rates, initiation of, 21
 Timber classification, 28
 Traders and passengers affected by the new Act, 151
 Trade Unions recognised under the 1921 Act, 150
 Traffic expenses, 76
 Transcontinental traffic rates in U.S.A., 55, 118-21
 Transportation Act (U.S.A.) 1920, 110, 122
 — —, policy declaration, 52, 106
 — — and importance of costs figures, 84
 Transport, co-operation in, vital to national prosperity, 94
 —, Ministry of, 156
 —, science of, 53, 55
 Trans-Siberian railway referred to, 56
 Tribunal, the Rates, 98-107, 151-4
 Tyler, Sir H., quoted, 88

 Undue preference prohibited, 6
 Uniformity in classification, 20, 41

 U.S.A., "blanket" scale of charges, 36, 37, 58
 —, classification of commodities, 24
 —, Interstate Commerce Commission, 24, 55, 58, 70, 83, 106, 107, 110, 122, 126, 128, 156
 — parallels, 55, 109
 — statistical tables from, 83-6
 — Transcontinental rates to the Pacific, 55, 118-21
 — Transportation Act, 1920, 52, 106, 110, 122
 —, water competition in, 52

 VALUE of commodities, a factor in classification, 25, 27
 Various descriptions of scale, 31

 WAGES and hours under the new Act, 148
 Water competition, general influence of, 50, 51
 "What the traffic will bear," 2, 3, 5, 83, 92-4, 127
 Wide responsibilities of Rates Tribunal, 101
 World becoming one market, 60

 "X Y Z" arrangement explained, 140, 141

 Zone scale for milk, 58, 59
 — — of charging, 31, 35, 36, 60

PITMAN'S BUSINESS HANDBOOKS

AN ABRIDGED LIST OF PRACTICAL GUIDES FOR
:: BUSINESS MEN AND ADVANCED STUDENTS ::

COMPLETE LIST OF COMMERCIAL BOOKS POST FREE ON APPLICATION

BOOK-KEEPING AND ACCOUNTS

- ADVANCED ACCOUNTS.** A Manual of Advanced Book-keeping and Accountancy for Accountants, Book-keepers, and Business Men. Edited by ROGER N. CARTER, M.Com., F.C.A., *Lecturer on Accounting at the University of Manchester.* In demy 8vo, cloth gilt, 1058 pp. 7s. 6d. net.
- KEY TO ADVANCED ACCOUNTS.** By R. A. GOODMAN. In demy 8vo, cloth, 954 pp. 20s.
- AUDITING, ACCOUNTING, AND BANKING.** By FRANK DOWLER, A.C.A., and E. MARDINOR HARRIS, *Associate of the Institute of Bankers.* In demy 8vo, cloth gilt, 328 pp. 7s. 6d. net.
- THE PRINCIPLES OF AUDITING.** A Practical Manual for Advanced Students and Practitioners. By F. R. M. DE PAULA, F.C.A. In demy 8vo, cloth gilt, 224 pp. 7s. 6d. net.
- ACCOUNTANCY.** By F. W. PIXLEY, F.C.A., *Barrister-at-Law.* Third Edition. In demy 8vo, cloth gilt, 318 pp. 7s. 6d. net.
- AUDITORS : THEIR DUTIES AND RESPONSIBILITIES.** By the same Author. Twelfth Edition. In demy 8vo, cloth gilt, 732 pp. 21s. net.
- AUDITING.** By W. H. BELL, M.C.S., C.P.A. In demy 8vo, cloth gilt, 534 pp. 21s. net.
- COST ACCOUNTING.** By W. B. LAWRENCE, *Professor of Accounting, De Paul University.* In demy 8vo, cloth gilt, 513 pp. 21s. net.
- COST ACCOUNTING : ITS HIGHER ORGANIZATION AND CONTROL.** By W. AINSWORTH, A.C.I.S., A.C.W.A. In demy 8vo, cloth gilt, 103 pp. 5s. net.
- COST ACCOUNTS IN PRINCIPLE AND PRACTICE.** By A. CLIFFORD RIDGWAY, F.C.A. In demy 8vo, cloth gilt, with 40 specially prepared forms. 5s. net.
- COST ACCOUNTS FOR THE METAL INDUSTRY.** By H. E. PARKES, M.Com., A.C.W.A. In demy 8vo, cloth gilt, 156 pp. 10s. 6d. net.
- PRIMER OF COSTING.** By R. J. H. RYALL, F.C.W.A. In demy 8vo, cloth, 125 pp. 5s. net.
- DICTIONARY OF COSTING.** By the same Author. In demy 8vo, cloth gilt, 10s. 6d. net.
- THEORY AND PRACTICE OF COSTING.** By E. W. NEWMAN, A.C.A. In demy 8vo, cloth gilt, 203 pp. 8s. 6d. net.
- COSTING AND PRICE-FIXING.** By J. M. SCOTT MAXWELL, B.Sc. In demy 8vo, cloth gilt, 223 pp. 6s. net.
- COSTING ORGANIZATION FOR ENGINEERS.** By E. W. WORMAN, B.Sc., A.L.A.A. In demy 8vo, cloth, 96 pp. 3s. 6d. net.
- MANUAL OF COST ACCOUNTS.** By JULIUS LUNE, F.C.A. (Hons.) Third Edition. In demy 8vo, cloth gilt, 204 pp. 7s. 6d. net.

- MANUFACTURING BOOK-KEEPING AND COSTS.** By GEORGE JOHNSON, F.C.I.S. In demy 8vo, cloth gilt, 120 pp. 3s. 6d. net.
- COMPANY ACCOUNTS.** By ARTHUR COLES, F.C.I.S. Third Edition. In demy 8vo, cloth gilt, 440 pp. 7s. 6d. net.
- DICTIONARY OF BOOK-KEEPING.** By R. J. PORTERS. Second Edition. In demy 8vo, 780 pp. 7s. 6d. net.
- THE BOOK-KEEPER'S VADE MECUM.** By S. HOWARD WITHEY, F.C.I., A.L.A.A. A pocket companion for the book-keeper. In crown 8vo, 150 pp. 3s. 6d. net.
- THE ACCOUNTANT'S DICTIONARY.** Edited by F. W. PIXLEY, F.C.A., *Barrister-at-Law*. Assisted by about 30 specialist contributors. This important work places at the disposal of the practitioner a great store of information on all phases of accountancy, arranged in the most convenient form. Second Edition. In two vols., crown 4to, cloth gilt, 1017 pp. £3 3s. net.
- PRINCIPLES AND PRACTICE OF BOOK-KEEPING AND ACCOUNTS.** By B. G. VICKERY, A.C.A., F.C.I.S., A.S.A.A., F.C.W.A. Size 10½ in by 6 in., cloth gilt, 571 pp. 12s. 6d. net.
- MANUAL OF BOOK-KEEPING AND ACCOUNTANCY.** By A. NIXON, F.C.A., F.C.I.S., and H. E. EVANS, A.C.A. In demy 8vo, cloth gilt, 330 pp. 10s. 6d. net.
- THE ACCOUNTS OF EXECUTORS, ADMINISTRATORS, AND TRUSTEES.** With a Summary of the Law in so far as it relates to Accounts. By WILLIAM B. PHILLIPS, A.C.A. (Hons Inter. and Final), A.C.I.S. Sixth Edition, Revised. In demy 8vo, cloth gilt, 150 pp. 5s. net.
- APPOINTMENT IN RELATION TO TRUST ACCOUNTS.** By ALAN F. CHICK, *Incorporated Accountant*. In demy 8vo, cloth, 160 pp. 6s. net.
- PRACTICAL BOOK-KEEPING.** By GEO. JOHNSON, F.C.I.S. In crown 8vo, cloth, 420 pp. 6s. net.
- MODERN METHODS OF BOOK-KEEPING.** By R. H. EPPS, A.C.A. In demy 8vo, cloth, 343 pp. 4s. net.
- A COURSE IN BOOK-KEEPING.** By R. W. HOLLAND, M.A., M.Sc., LL.D. In demy 8vo, cloth, 290 pp. 4s. net.
- RAILROAD ACCOUNTS AND STATISTICS.** By C. E. WERMUTH. Size 6 in by 9 in., 362 pp. 17s. 6d. net.
- RAILWAY ACCOUNTS AND FINANCE.** *Railway Companies (Accounts and Returns) Act, 1911.* By ALLEN E. NEWHOOK, A.K.C. In demy 8vo, cloth gilt, 148 pp. 5s. net.
- DEPRECIATION AND WASTING ASSETS, and Their Treatment in Computing Annual Profit and Loss.** By P. D. LEAKE, F.C.A. Fourth Edition. In demy 8vo, cloth gilt, 257 pp. 15s. net.
- COMMERCIAL GOODWILL.** Its History, Value, and Treatment in Accounts. By the same Author. In demy 8vo, cloth gilt, 260 pp. 21s. net.
- SINKING FUNDS, RESERVE FUNDS, AND DEPRECIATION.** By J. H. BURTON, A.S.A.A. In demy 8vo, cloth, 99 pp. 3s. 6d. net.
- ACCOUNTING.** By S. S. DAWSON, F.C.A., and R. C. DE ZOUCHE, F.C.A. In demy 8vo, cloth gilt, 290 pp. 10s. 6d. net.
- CONSIGNMENTS, ACCOUNT SALES, AND ACCOUNTS CURRENT.** By E. J. HAMMOND, A.C.I.S., A.L.A.A. In demy 8vo, cloth, 160 pp. 5s. net.
- BRANCH ACCOUNTS.** By P. TAGGART, A.S.A.A. In demy 8vo, 87 pp. 3s. net.
- BUILDERS' ACCOUNTS AND COSTS.** By ROBERT C. LEGGE, F.C.W.A. In demy 8vo, cloth gilt, 130 pp. 3s. 6d. net.
- HOSPITAL ACCOUNTS AND FINANCIAL CONTROL.** By J. E. STONE, A.S.A.A. In crown 4to, cloth gilt, 160 pp. 21s. net.

BUSINESS TRAINING, ETC.

- LECTURES ON BRITISH COMMERCE**, including Finance, Insurance, Business, and Industry. With a Preface by the Hon. W. PEMBER REEVES. In demy 8vo, cloth gilt, 295 pp. 7s. 6d. net.
- THE THEORY AND PRACTICE OF COMMERCE**. Being a Complete Guide to Methods and Machinery of Business. Edited by F. HELLIS, F.C.I.S., assisted by Specialist Contributors. In demy 8vo, cloth gilt, 620 pp., with many facsimile forms. 7s. 6d. net.
- THE PRINCIPLES AND PRACTICE OF COMMERCE**. By JAMES STEPHENSON, M.A., M.Com., D.Sc. In demy 8vo, cloth gilt, 650 pp., with many facsimile forms. 8s. 6d. net.
- THE PRINCIPLES AND PRACTICE OF COMMERCIAL CORRESPONDENCE**. By the same Author. In demy 8vo, 320 pp. 7s. 6d. net.
- THE PRINCIPLES OF COMMERCIAL HISTORY**. By the same Author. In demy 8vo, 279 pp. 7s. 6d. net.
- THE PRINCIPLES AND PRACTICE OF COMMERCIAL ARITHMETIC**. By P. W. NORRIS, M.A., B.Sc. (Hons.). In demy 8vo, 452 pp. 7s. 6d. net.
- MODERN BUSINESS AND ITS METHODS**. A Manual of Business Organization, Management, and Office Procedure for Commercial Students and Business Men. By W. CAMPBELL, *Chartered Secretary*. In crown 8vo, cloth, 493 pp. 7s. 6d. net.
- THE PRINCIPLES OF BUSINESS**. By C. W. GERSTENBERG. Third Edition. Size 5½ in. by 8 in., cloth, 821 pp. 16s. net.
- SHORT STORY WRITING AND FREE-LANCE JOURNALISM**. By S. A. MOSELEY. In demy 8vo, cloth gilt, 247 pp. 7s. 6d. net.

INSURANCE

- THE PRINCIPLES OF INSURANCE AND THEIR APPLICATION**. By J. ALFRED EKR. In demy 8vo, cloth, 186 pp. 5s. net.
- INSURANCE**. A Practical Exposition for the Student and Business Man. By T. E. YOUNG, B.A., F.R.A.S. With a Practical Section on Workmen's Compensation Insurance, by W. R. SIRONG, F.I.A., and the National Insurance Scheme, by VIVYAN MARR, F.F.A., F.I.A. Third Edition, Revised and Enlarged. In demy 8vo, cloth gilt, 440 pp. 10s. 6d. net.
- INSURANCE OFFICE ORGANIZATION, MANAGEMENT, AND ACCOUNTS**. By T. E. YOUNG, B.A., F.R.A.S., and RICHARD MASTERS, A.C.A. Second Edition, Revised. In demy 8vo, cloth gilt, 150 pp. 6s. net.
- INSURANCE PRINCIPLES AND PRACTICES**. By R. RUGGEL and H. J. LOMAN. Size 6 in. by 9 in., cloth, 450 pp. 16s. net.
- THE PRINCIPLES OF COMPOUND INTEREST**. By H. H. EDWARDS, F.I.A. In demy 8vo, cloth gilt, 135 pp. 5s. net.
- THE ELEMENTS OF ACTUARIAL SCIENCE**. By R. E. UNDERWOOD, M.B.E., F.I.A. Second Edition. In crown 8vo, cloth, 148 pp. 5s. net.
- THE PRINCIPLES AND PRACTICE OF FIRE INSURANCE**. By FRANK GODWIN. Second Edition. In demy 8vo, cloth gilt, 112 pp. 5s. net.
- THE COMMON HAZARDS OF FIRE INSURANCE**. By W. G. KUBLER RIDLEY, F.C.I.I. Second Edition. In demy 8vo, cloth gilt, 92 pp. 5s. net.
- THE LAW AND PRACTICE AS TO FIDELITY GUARANTEES**. By C. EVANS, *Barrister-at-Law*; and F. H. JONLS. Second Edition. In demy 8vo, cloth gilt, 172 pp. 6s. net.
- INSURANCE OF PUBLIC LIABILITY RISKS**. By S. V. KIRKPATRICK, F.C.I.I. In demy 8vo, cloth gilt, 152 pp. 5s. net.

- WORKMEN'S COMPENSATION INSURANCE.** By C. E. GOLDING, LL.B., F.C.I. In demy 8vo, cloth gilt, 112 pp. 5s. net.
- MOTOR INSURANCE.** By W. F. TODD. In demy 8vo, cloth gilt, 176 pp. 6s. net.
- GUIDE TO MARINE INSURANCE.** By H. KEATE. Sixth Edition. In crown 8vo, cloth, 203 pp. 3s. 6d. net.
- GUIDE TO LIFE ASSURANCE.** By S. G. LEIGH, *Fellow of the Institute of Actuaries*. A Handbook of the Practical and Scientific Aspects of the Business. In crown 8vo, cloth, 192 pp. 5s. net.
- LIFE ASSURANCE FROM PROPOSAL TO POLICY.** By H. HOSKING TAYLER, F.I.A., A.C.L.I., and V. W. TYLER, F.I.A. In demy 8vo, cloth gilt, 6s. net.
- THE PRINCIPLES AND PRACTICE OF PERSONAL ACCIDENT, DISEASE, AND SICKNESS INSURANCE.** By J. B. WELSON, LL.M. In demy 8vo, cloth gilt, 133 pp. 5s. net.
- PHYSIOLOGY AND ANATOMY.** By H. GARDINER, M.S. (Lond.), F.R.C.S. (Eng.). In demy 8vo, cloth gilt, 428 pp. 10s. 6d. net.
- TALKS ON INSURANCE LAW.** By JOS. A. WATSON, ESQ., LL.B. In crown 8vo, cloth, 140 pp. 3s. 6d. net.
- PENSION, ENDOWMENT, LIFE ASSURANCE, AND OTHER SCHEMES FOR COMMERCIAL COMPANIES.** By HAROLD DOUGHARTY, F.C.I.S. In demy 8vo, cloth gilt, 103 pp. 6s. net.
- COMMERCIAL CREDIT RISKS.** By A. H. SWAIN. In demy 8vo, 148 pp. 5s. net.
- THE INSURANCE OF FOREIGN CREDITS.** By H. J. LOMAN, Ph.D. Size 6 in. by 9 in., 144 pp. 10s. 6d. net.
- THE SUCCESSFUL INSURANCE AGENT.** By J. J. BISGOOD, B.A. In crown 8vo, cloth, 135 pp. 2s. 6d. net.
- THE BUSINESS MAN'S GUIDE TO INSURANCE.** By A. PHILPOTT. In crown 8vo, cloth, 183 pp. 3s. 6d. net.

ORGANIZATION AND MANAGEMENT

- OFFICE ORGANIZATION AND MANAGEMENT.** Including Secretarial Work. By LAWRENCE R. DICKSEE, M.Com., F.C.A., and Sir H. E. BLAIN, C.B.E. Seventh Edition, Revised. In demy 8vo, cloth gilt, 314 pp. 7s. 6d. net.
- COUNTING HOUSE AND FACTORY ORGANIZATION.** A Practical Manual of Modern Methods applied to the Counting House and Factory. By J. GILMOUR WILLIAMSON. In demy 8vo, cloth gilt, 182 pp. 7s. 6d. net.
- FILING SYSTEMS.** Their Principles and their Application to Modern Office Requirements. By EDWARD A. COPE. In crown 8vo, cloth gilt, 200 pp., with illustrations. 3s. 6d. net.
- SOLICITOR'S OFFICE ORGANIZATION, MANAGEMENT, AND ACCOUNTS.** By E. A. COPE and H. W. H. ROBINS. In demy 8vo, cloth gilt, 176 pp., with numerous forms. 6s. net.
- COLLIERY OFFICE ORGANIZATION AND ACCOUNTS.** By J. W. INNES, F.C.A., and T. COLIN CAMPBELL, F.C.I. In demy 8vo. 7s. 6d. net.
- BUSINESS OWNERSHIP ORGANIZATION.** By A. H. STOCKDER, M.A. In demy 8vo, cloth, 630 pp. 10s. 6d. net.
- COMMERCIAL MANAGEMENT.** By CUNLIFFE L. BOLLING. In demy 8vo, cloth gilt, 435 pp. 10s. 6d. net.

- ORGANIZATION AND MANAGEMENT IN THE FLOUR MILLING INDUSTRY.** By E. LEIGH PLARSON, M.Sc. (Tech.), A.I.C. In demy 8vo, cloth gilt, 254 pp. 12s. 6d. net.
- GROCERY BUSINESS ORGANIZATION AND MANAGEMENT.** By C. L. T. BEECHING. With Chapters on Buying a Business, Grocer's Office Work and Book-keeping, etc., by J. A. SMART. Third Edition. In demy 8vo, cloth, 183 pp. 6s. net.
- HOTEL ORGANIZATION, MANAGEMENT, AND ACCOUNTANCY.** By G. DE BONI and F. F. CHARLES. In demy 8vo, cloth gilt, 215 pp. 10s. 6d. net.
- STOCKBROKERS' OFFICE ORGANIZATION, MANAGEMENT, AND ACCOUNTS.** By JULIUS E. DAY. In demy 8vo, cloth gilt, 250 pp. 7s. 6d. net.
- THE HISTORY, LAW, AND PRACTICE OF THE STOCK EXCHANGE.** By A. P. POLEY, B.A., *Barrister-at-Law*, and F. H. CARRUTHERS GOULD. Third Edition, Revised. In demy 8vo, cloth gilt, 348 pp. 7s. 6d. net.
- SELF-ORGANIZATION FOR BUSINESS MEN.** By MORLEY DAINOW, B.Sc. (Hons.), Lond. In demy 8vo, cloth, 154 pp. 5s. net.

INDUSTRIAL ADMINISTRATION

- THE PHILOSOPHY OF MANAGEMENT.** By OLIVER SHELDON, B.A. In demy 8vo, cloth gilt, 310 pp. 10s. 6d. net.
- THE PSYCHOLOGY OF MANAGEMENT.** By L. M. GILBRETH. In demy 8vo, 354 pp. 7s. 6d. net.
- EMPLOYMENT MANAGEMENT.** Compiled and edited by DANIEL BLOOMFIELD. In demy 8vo, 507 pp. 8s. 6d. net.
- LABOUR ATTITUDES AND PROBLEMS.** By W. E. ATKINS and H. D. LASSWELL. Size 6 in. by 9 in., cloth gilt. 16s. net.
- PROBLEMS OF LABOUR.** Compiled and Edited by DANIEL BLOOMFIELD. In demy 8vo, cloth gilt, 434 pp. 8s. 6d. net.
- MODERN INDUSTRIAL MOVEMENTS.** Compiled and Edited by DANIEL BLOOMFIELD. In demy 8vo, cloth gilt, 380 pp. 10s. 6d. net.
- COMMON SENSE AND LABOUR.** By SAMUEL CROWTHER. In demy 8vo, cloth gilt, 290 pp. 8s. 6d. net.
- CURRENT SOCIAL AND INDUSTRIAL FORCES.** Edited by LIONEL D. EDIE. In demy 8vo, cloth gilt, 393 pp. 12s. 6d. net.
- A MERCHANT'S HORIZON.** By A. L. FILENE and BURTON KLEINE. In demy 8vo, cloth gilt, 272 pp. 10s. 6d. net.
- INDUSTRIAL CONFLICT: THE WAY OUT.** By the Right Hon. GEORGE N. BARNES. In crown 8vo, 110 pp. 3s. 6d. net.
- LECTURES ON INDUSTRIAL ADMINISTRATION.** Edited by B. MUSCIO, M.A. In crown 8vo, cloth, 276 pp. 6s. net.
- OUTLINES OF INDUSTRIAL ADMINISTRATION.** By R. O. HERFORD, H. T. HILDAGE, and H. G. JENKINS. In demy 8vo, cloth gilt, 124 pp. 6s. net.
- INDUSTRIAL CONTROL.** By F. M. LAWSON. In demy 8vo, cloth gilt, 130 pp. 8s. 6d. net.
- ENGINEERING FACTORY SUPPLIES.** By W. J. HISCOX. In demy 8vo, cloth gilt, 184 pp. 5s. net.
- FACTORY LAY-OUT, PLANNING, AND PROGRESS.** By W. J. HISCOX. In demy 8vo, cloth gilt, 200 pp. 7s. 6d. net.
- FACTORY ADMINISTRATION IN PRACTICE.** By W. J. HISCOX. In demy 8vo, cloth gilt. 8s. 6d. net.
- MANAGEMENT.** By J. LEE, M.A., M.Com.Sc. In demy 8vo, cloth gilt, 133 pp. 5s. net.

- AN INTRODUCTION TO INDUSTRIAL ADMINISTRATION.** By JOHN LEE, M.A., M.Com.Sc. In demy 8vo, cloth gilt, 200 pp. 5s. net.
- INDUSTRIAL ORGANIZATION.** By JOHN LEE, M.A., M.Com.Sc. In demy 8vo, cloth gilt, 130 pp. 5s. net.
- THE PRINCIPLES OF INDUSTRIAL WELFARE.** By JOHN LEE, M.A., M.Com.Sc. In demy 8vo, cloth, 103 pp. 5s. net.
- WELFARE WORK IN INDUSTRY.** By members of the Institute of Industrial Welfare Workers. Edited by ELEANOR T. KELLY. In demy 8vo, cloth, 128 pp. 5s. net.
- THE STANDARDIZATION OF WORKSHOP OPERATIONS.** By T. PILKINGTON, M.I.Mech.E. 16s. net.
- WORKSHOP COMMITTEES.** By C. G. RENOLD. Reprinted from the Report of the British Association Sub-Committee on Industrial Unrest. In demy 8vo, 52 pp. 1s. net.
- RESEARCH IN INDUSTRY.** By A. P. M. FLEMING, C.B.E., M.Sc., M.I.E.E., and J. G. PEARCE, B.Sc., A.M.I.E.E. In demy 8vo, cloth gilt, 264 pp. 10s. 6d. net.
- INTRODUCTION TO THE PRINCIPLES OF INDUSTRIAL ADMINISTRATION.** By A. P. M. FLEMING and H. J. BROCKLEHURST, M.Eng. A.M.I.E.E. In demy 8vo, 140 pp. 3s. 6d. net.
- THE CONTROL OF WAGES.** By W. HAMILTON and S. MAY. In crown 8vo, cloth, 188 pp. 5s. net.
- SHARING PROFITS WITH EMPLOYEES.** By J. A. BOWIE, M.A. Second Edition. In demy 8vo, cloth gilt, 230 pp. 10s. 6d. net.
- PRACTICAL ADVICE TO INVENTORS AND PATENTEES.** By C. M. LINLEY. In crown 8vo, cloth, 134 pp. 3s. 6d. net.
- PATENTS FOR INVENTIONS.** By J. EWART WALKER, B.A., *Barrister-at-Law*, and R. BRUCE FOSTER, B.Sc., *Barrister-at-Law*. In demy 8vo, cloth gilt, 400 pp. 21s. net.

TRANSPORT

- INDUSTRIAL TRAFFIC MANAGEMENT.** By GEO. B. LISSENDEN, *Author of "Railway (Rebates) Case Law," etc., etc.* With a Foreword by the late LORD LEVERHULME. Second Edition, Revised and Enlarged. In demy 8vo, cloth gilt, 352 pp. 21s. net.
- HOW TO SEND GOODS BY ROAD, RAIL, AND SEA.** By the same Author. In crown 8vo, cloth, 92 pp. 2s. net.
- COMMERCIAL AIR TRANSPORT.** By LIEUT.-COL. IVO EDWARDS, C.M.G., and F. TIMMS, A.F.R.Ae.S. In demy 8vo, cloth, 178 pp. 7s. 6d. net.
- RAILWAY RATES, PRINCIPLES, AND PROBLEMS.** By PHILIP BURTT, M.Inst.T. In demy 8vo, cloth gilt, 174 pp. 6s. net.
- MODERN RAILWAY OPERATION.** By D. R. LAMB, M.Inst.T. In demy 8vo, cloth, 7s. 6d. net.
- MOTOR ROAD TRANSPORT FOR COMMERCIAL PURPOSES.** By JOHN PHILLIMORE. With an Introduction by Sir H. P. MAYBURY, K.C.M.G., C.B. Second Edition. In demy 8vo, cloth gilt, 233 pp. 10s. 6d. net.
- THE HISTORY AND ECONOMICS OF TRANSPORT.** By ADAM W. KIRKALDY, M.A., B.Litt. (Oxford), M.Com. (Birmingham), and ALFRED DUDLEY EVANS. Third Edition. In demy 8vo, cloth gilt, 364 pp. 15s. net.
- THE RIGHTS AND DUTIES OF TRANSPORT UNDERTAKINGS.** By H. BARRS DAVIES, M.A. In demy 8vo, cloth, 135 pp. 5s. net.

SHIPPING

SHIPPING OFFICE ORGANIZATION, MANAGEMENT, AND ACCOUNTS.

By ALFRED CALVERT. In demy 8vo, cloth gilt, 203 pp. 6s. net.
THE SHIPPER'S DESK BOOK. By J. A. DUNNAGE. With a Foreword by Sir JOSEPH C. BROODBANK, *President of the Institute of Transport*, 1923-24. In crown 8vo, cloth, 190 pp. 3s. 6d. net.

SHIPPING TERMS AND PHRASES. By the same Author. Cloth 2s. 6d. net.

THE EXPORTER'S HANDBOOK AND GLOSSARY. By F. M. DUDENEY. In demy 8vo, cloth gilt, 254 pp. 7s. 6d. net.

THE IMPORTER'S HANDBOOK. By J. A. DUNNAGE, *Graduate of the Institute of Transport*. In demy 8vo, cloth gilt, 382 pp. 10s. 6d. net.

HOW TO EXPORT GOODS. By F. M. DUDENEY. In crown 8vo, cloth, 112 pp. 2s. net.

HOW TO IMPORT GOODS. By J. A. DUNNAGE. In crown 8vo, cloth, 128 pp. 2s. net.

IMPORT AND EXPORT TRADE. By A. S. HARVEY, *Officer of H.M. Customs and Excise*. In demy 8vo, cloth gilt, 518 pp. 21s. net.

EXPORTING TO THE WORLD. By A. A. PRECIADO. A manual of practical export information. In demy 8vo, cloth gilt, 447 pp. 21s. net.

FOREIGN TRADE. By HOWARD C. KIDD. Second Edition. Size 5½ in. by 8 in., cloth, 440 pp. 12s. 6d. net.

EXPORT CREDITS AND COLLECTIONS. By G. C. POOLE. Size 6 in. by 9 in., cloth gilt. 16s. net.

CASE AND FREIGHT COSTS. The Principles of Calculation relating to the Cost of, and Freight on, Sea or Commercial Cases. By A. W. E. CROSFIELD. In crown 8vo, cloth, 62 pp. 2s. net.

CONSULAR REQUIREMENTS FOR EXPORTERS AND SHIPPERS TO ALL PARTS OF THE WORLD. By J. S. NOWERY. Second Edition, Revised and Enlarged. In demy 8vo, cloth 7s. 6d. net.

INTRODUCTION TO SHIPBROKING. By C. D. MACMURRAY and M. M. CREE. In demy 8vo, cloth, 166 pp. 3s. 6d. net.

SHIPPING AND SHIPBROKING. By the same Authors. Second Edition. In demy 8vo, cloth gilt, 543 pp. 15s. net.

SHIPPING BUSINESS METHODS. By R. B. PAUL. In demy 8vo, cloth gilt, 104 pp. 3s. 6d. net.

SHIPPING FINANCE AND ACCOUNTS. By the same Author. In demy 8vo, cloth gilt, 74 pp. 2s. 6d. net.

BANKING AND FINANCE

MONEY, EXCHANGE, AND BANKING, in their Practical, Theoretical, and Legal Aspects. A complete Manual for Bank Officials, Business Men, and Students of Commerce. By H. T. EASTON, *Associate of the Institute of Bankers*. Third Edition. In demy 8vo, cloth gilt, 331 pp. 6s. net.

AN OUTLINE OF ENGLISH BANKING ADMINISTRATION. By JOSEPH SYKES, B.A. (Hons.), *Fellow of the Royal Economic Society*. In crown 8vo, cloth, 96 pp. 2s. 6d. net.

ENGLISH BANKING METHODS. The Practical Operation of an English Bank. By LEONARD LE MARCHANT MINTY, Ph.D., B.Sc. (Econ). Third Edition. In demy 8vo, cloth gilt, 480 pp. 15s. net.

ENGLISH PUBLIC FINANCE. From the Revolution of 1688. With Chapters on the Bank of England. By HARVEY E. FRISK. In demy 8vo, cloth gilt, 207 pp. 7s. 6d. net.

INTERNATIONAL TRADE FINANCE. By G. W. EDWARDS, Ph.D. In demy 8vo, cloth gilt, 512 pp. 10s. 6d. net.

- MODERN FINANCE AND INDUSTRY.** By A. S. WADE, *City Editor of "The Daily News" and "Star."* In demy 8vo, cloth gilt, 136 pp. 5s. net.
- FOREIGN EXCHANGE ACCOUNTING.** By C. DJORUP, B.C.S., C.P.A. Size 6 in. by 9 in., cloth gilt, 420 pp. 15s. net
- FOREIGN EXCHANGE AND FOREIGN BILLS IN THEORY AND IN PRACTICE.** By W. F. SPALDING, *Fellow of the London Institute of Bankers* Sixth Edition In demy 8vo, cloth gilt, 283 pp. 7s. 6d. net.
- EASTERN EXCHANGE, CURRENCY, AND FINANCE.** By the same Author. Fourth Edition In demy 8vo, cloth, 485 pp., illustrated. 15s. net
- FOREIGN EXCHANGE, A PRIMER OF.** By the same Author Second Edition. In crown 8vo, cloth, 108 pp. 3s. 6d. net
- THE FINANCE OF FOREIGN TRADE.** By the same Author In demy 8vo, cloth gilt, 190 pp. 7s. 6d. net
- BANKERS' CREDITS AND ALL THAT APPERTAINS TO THEM IN THEIR PRACTICAL, LEGAL, AND EVERYDAY ASPECTS.** By the same Author Second Edition In demy 8vo, cloth gilt, 126 pp. 10s. 6d. net
- THE FUNCTIONS OF MONEY.** By the same Author. With a Foreword by G. ARMITAGE SMITH, D. Lit., M.A. In demy 8vo, cloth gilt, 179 pp. 7s. 6d. net
- THE LONDON MONEY MARKET.** By the same Author. A practical guide to what it is, where it is, and the operations conducted in it Third Edition. In demy 8vo, cloth gilt, 232 pp. 10s. 6d. net
- PRACTICAL BANKING.** By J. F. G. BAGSHAW With chapters on "The Principles of Currency," by C. F. HANNAFORD, and "Bank Book-keeping," by W. H. PEARD. Revised Edition In demy 8vo, cloth gilt, 448 pp. 7s. 6d. net.
- BANK ORGANIZATION, MANAGEMENT, AND ACCOUNTS.** By J. F. DAVIS, D. Lit., M.A., LL.B. In demy 8vo, cloth gilt, 165 pp. 6s. net.
- CHEQUES: THEIR ORIGIN AND DEVELOPMENT, AND HOW THEY ARE HANDLED BY AN ENGLISH BANK.** By C. F. HANNAFORD. Edited by Sir JOHN PAGET, K.C. In demy 8vo, cloth gilt, 195 pp. 6s. net
- BILLS, CHEQUES, AND NOTES.** A Handbook for Business Men and Lawyers By J. A. SLATER, B.A., LL.B. (Lond.) Fourth Edition. In demy 8vo, cloth gilt, 214 pp. 6s. net.
- THE BANKERS' CLEARING HOUSE.** What it is and what it does By P. W. MATTHEWS In demy 8vo, cloth gilt, 168 pp. 7s. 6d. net
- BANKERS' SECURITIES AGAINST ADVANCES.** By LAWRENCE A. FOGG. *Certificated Associate of the Institute of Bankers.* In demy 8vo, cloth gilt, 120 pp. 6s. net
- BANKER AND CUSTOMER.** By S. E. THOMAS, B.Com. (Lond.). Size 10½ in. by 6 in., cloth gilt, 732 pp. 12s. 6d. net.
- THE BANKER AS A LENDER.** By F. E. STEELE. In demy 8vo, cloth gilt, 150 pp. 5s. net
- HOW TO SUCCEED IN A BANK.** By the same Author. In crown 8vo, cloth, 156 pp. 3s. 6d. net.
- BANKERS' ADVANCES.** By F. R. STEAD. Edited by Sir JOHN PAGET, K.C. In demy 8vo, cloth, 144 pp. 6s. net.
- BANKERS' TESTS.** By F. R. STEAD In demy 8vo, cloth gilt, 144 pp. 10s. 6d. net
- BANKERS' ADVANCES AGAINST PRODUCE.** By A. WILLIAMS. In demy 8vo, cloth gilt, 147 pp. 6s. net
- ENGLISH COMPOSITION AND BANKING CORRESPONDENCE.** By L. E. W. O. FULLBROOK-LEGGATT, M.C., B.A. In demy 8vo, cloth gilt, 300 pp. 5s. net.
- SIMPLE INTEREST TABLES.** By Sir WM. SCHOOLING, K.B.E. In crown 8vo, cloth gilt, 188 pp. 21s. net.

DICTIONARY OF BANKING. A Complete Encyclopaedia of Banking Law and Practice. By W. THOMSON, *Bank Inspector*. Sixth Edition, Revised and Enlarged. In crown 4to, half-leather gilt, 720 pp. 30s. net.

TITLE DEEDS AND THE RUBINENTS OF REAL PROPERTY LAW. By F. R. SIEAD. Third Edition. In demy 8vo, cloth, 151 pp. 6s. net

SECRETARIAL WORK, ETC.

THE COMPANY SECRETARY'S VADE MECUM. Edited by PHILIP TOVEY, F.C.I.S. Third Edition, Revised and Enlarged. In foolscap 8vo, cloth 8s. 6d. net.

SECRETARY'S HANDBOOK. A Practical Guide to the Work and Duties in connection with the Position of Secretary to an institution or to a private individual. Edited by Sir H. E. BLAIN, C.B.E. In demy 8vo, cloth gilt, 168 pp. 5s. net.

GUIDE FOR THE COMPANY SECRETARY. A Practical Manual and Work of Reference for the Company Secretary. By ARTHUR COLES, F.C.I.S. Second Edition. In demy 8vo, cloth gilt, 432 pp. 6s. net.

DICTIONARY OF SECRETARIAL LAW AND PRACTICE. A Comprehensive Encyclopaedia of Information and Direction on all matters connected with the work of a Company Secretary. Edited by PHILIP TOVEY, F.C.I.S., assisted by specialist contributors. Third Edition. In crown 4to, half-leather gilt, 1011 pp. 42s. net.

HONORARY SECRETARISHIP. By W. B. THORNE. In crown 8vo, cloth, 81 pp. 2s. 6d. net.

DEBENTURES. A Handbook for Limited Company Officials, Investors, and Business Men. By F. SHEWELL COOPER, M.A., *of the Inner Temple, Barrister-at-Law*. In demy 8vo, cloth gilt, 149 pp. 6s. net.

THE TRANSFER OF STOCKS, SHARES, AND OTHER MARKETABLE SECURITIES. A Manual of the Law and Practice. By F. D. HEAD, B.A. (Oxon), *Barrister-at-Law*. Third Edition, Revised and Enlarged. In demy 8vo, cloth gilt, 220 pp. 10s. 6d. net.

LIMITED LIABILITY COMPANIES. By R. ASHWORTH, A.C.A., F.S.A.A. In demy 8vo, cloth gilt, 459 pp. 10s. 6d. net.

THE COMPANY REGISTRAR'S MANUAL. By J. J. QUINLIVAN. In demy 8vo, cloth gilt, 343 pp. 10s. 6d. net.

MEETINGS. The Regulation of and Procedure at Meetings of Companies and Public Bodies and at Public Meetings. By F. D. HEAD, B.A. (Oxon), *of Lincoln's Inn, Barrister-at-Law*. In demy 8vo, cloth gilt, 216 pp. 5s. net.

THE CHAIRMAN'S MANUAL. Being a Guide to the Management of Meetings in general. By GURDON PALIN, *Barrister-at-Law*, and ERNEST MARTIN, F.C.I.S. In crown 8vo, cloth gilt, 192 pp. 5s. net.

HOW TO TAKE MINUTES. Edited by ERNEST MARTIN, F.C.I.S. Second Edition. In demy 8vo, cloth gilt, 130 pp. 2s. 6d. net.

PROSPECTUSES: HOW TO READ AND UNDERSTAND THEM. By PHILIP TOVEY, F.C.I.S. In demy 8vo, cloth, 109 pp. 5s. net.

PRACTICAL SHARE TRANSFER WORK. By F. W. LIDINGTON. In crown 8vo, 123 pp. 3s. 6d. net.

QUESTIONS AND ANSWERS ON SECRETARIAL PRACTICE. By E. J. HAMMOND, A.C.I.S., A.L.A.A. In demy 8vo, cloth gilt, 250 pp. 7s. 6d. net.

EXAMINATION NOTES ON SECRETARIAL PRACTICE. By C. W. ADAMS, A.C.I.S. In crown 8vo, cloth, 80 pp. 2s. 6d. net.

PRACTICAL DIRECTORSHIP. By H. E. COLESWORTHY, A.S.A.A., and S. T. MORRIS, A.S.A.A., A.C.W.A. A guide to the duties of a company director. In demy 8vo, cloth gilt, 248 pp. 7s. 6d. net.

COMMON COMMODITIES AND INDUSTRIES SERIES

In each of the handbooks in this series a particular product or industry is treated by an expert writer and practical man of business. Beginning with the life history of the plant, or other natural product, he follows its development until it becomes a commercial commodity, and so on through the various phases of its sale in the market and its purchase by the consumer. Industries are treated in a similar manner.

Each book in crown 8vo, illustrated. 3s. net.

Acids and Alkalis	Electricity	Perfumery
Alcohol in Commerce	Engraving	Petroleum
Aluminium	Explosives, Modern	Photography
Anthracite	Fertilizers	Platinum Metals
Asbestos	Film Industry, The	Player Piano, The
Bookbinding Craft and Industry, The	Fishing Industry, The	Pottery
Boot and Shoe Industry	Furniture	Rice
Bread Making	Furs	Rubber
Brush Making	Gas and Gas Making	Salt
Butter and Cheese	Glass	Shipbuilding
Button Industry, The	Gloves and the Glove Trade	Silk
Carpets	Gold	Silver
Clays	Gums and Resins	Soap
Clocks and Watches	Incandescent Lighting	Sponges
Cloth and the Cloth Trade	Ink	Starch
Clothing Trades Industry	Internal Combustion Engines	Stones and Quarries
Coal	Iron and Steel	Straw Hats
Coal Tar	Ironfoundry	Sugar
Cocoa	Jute	Sulphur
Coffee	Knitted Fabrics	Talking Machines
Cold Storage and Ice Making	Lead	Tea
Concrete and Reinforced Concrete	Leather	Telegraphy, Telephony, and Wireless
Copper	Linen	Textile Bleaching
Cordage and Cordage Hemp and Fibres	Locks and Lockmaking	Timber
Corn Trade, The British	Match Industry	Tin and the Tin Industry
Cotton	Meat	Tobacco
Cotton Spinning	Motor Boats	Velvet and Corduroy
Cycle Industry, The	Motor Industry, The	Wallpaper
Drugs in Commerce	Nickel	Weaving
Dyes	Oil Power	Wheat
Electric Lamp Industry	Oils	Wine and the Wine Trade
	Paints and Varnishes	Wool
	Paper	Worsted
	Patent Fuels	Zinc

PITMAN'S SHORTHAND
Invaluable for all Business and Professional Men

